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AMERICAN NURSERYMAN

The Nurseryman's Forte: To Make America More Beautiful and Fruitful

APRIL 15, 1946



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The Nurseryman's Forte: To Make America More Beautiful and Fruitful

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CLOSING DATE—Present printing conditions require that more time be given for putting current issues of the American Nurseryman through the press. So if you send material for either the advertising or the news columns of the May 1 issue, please mail in time to reach this office by April 16.



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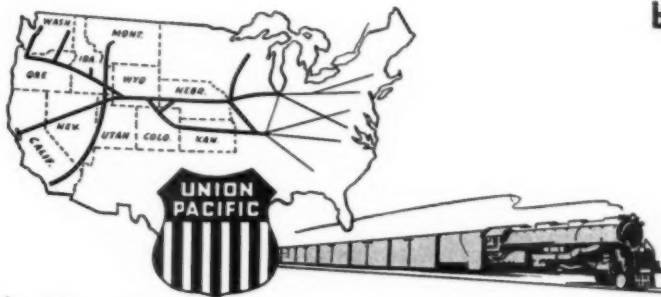
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The Progressive

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The Strategic Middle Route

AMERICAN NURSERYMAN

F. R. KILNER, Editor

Editorial

ASSOCIATION SERVICE.

State associations of nurserymen hitherto have saved money for their members—and other nurserymen—in an indirect manner. Their actions have resulted, in some states, in lower personal property taxes on growing nursery stock, in lower workmen's compensation insurance rates, in lien laws for nurserymen and in reduced license fees, to mention but a few achievements and not more general matters of legislation promoted or prevented.

The national association in recent years has saved considerable sums to individual nurserymen by securing the agricultural classification of their activities, otherwise subject to regulations or taxes under federal laws.

Because these savings have been indirect, or made available alike to members and nonmembers, the precise profit in association membership has not been exactly estimated or even duly appreciated.

Extending its service to members into new fields, the California Association of Nurserymen will make it possible for them to show a direct and real profit on their annual membership fees. Primarily this can be done by obtaining workmen's compensation insurance at a special rate through the association office. Other services of a money-saving character are contemplated.

If such projects are successful, association memberships may be sought after by the rank and file, who hitherto have required selling before being enrolled.

SPRINGTIME RACKETS.

Spring is here, reports the Chicago Better Business Bureau, and with it a host of rackets to plague the gardener and homeowner.

"Believe it or not," the bureau points out in its publication, *The Report*, "people are still buying grass seed from itinerant salesmen which will produce grass that will grow to the desired height, cease to grow, remain green and fresh during the entire season, and will require no mowing!"

The organization warns against itinerant "tree surgeons" who offer to treat shade trees.

But springtime rackets are not confined to the garden. Other house-to-

house salesmen will present themselves as furnace repairmen, tear the furnace apart and leave it that way, the bureau warns.

Still others will offer to put new siding on the home for "practically nothing" just for "demonstration purposes." But the job costs plenty before they are through.

The most pernicious of spring pests is the itinerant roofer who just "happens to be in the neighborhood." He leads one to believe the cost will be small, but it turns out far from that.

The bureau warned the Chicago public to deal only with established, reputable firms and to refuse cash in advance to unknown solicitors.

BUSINESS IDEALS.

Times have changed businessmen, as everything else, and the economic royalist of the present day is an enlightened socialist in comparison with the ruthless exploiter of a century ago, as any student of this country's history can testify.

Some have not learned the lesson of progress, it is true, but the present standards of business show an idealism that was at one time thought foreign to the market place.

The past few years of wartime scarcity of labor and materials have taught some lessons the hard way. Buyers learned the advantage of being a good customer, because the sellers gave first consideration to those who had previously been considerate of them. Sellers, on the other hand, sought ways not to decline or curtail orders that would retain good will for the day when orders would be asked for again. Employers learned the wisdom of fair employee relations.

All of us, in short, have been obliged to think of the other fellow, instead of only our own interests. We have learned to take into account the problems of those at the other end of our transactions. It has broadened the viewpoint of many and has given some a liberal education.

What we have learned in wartime the hard way—to have consideration for the other fellow—we might have approached more gently by the ideals of ethical guides or the golden rule of religion. In fact, many have done so, more or less. That is the reason for the advance in business standards in the past century.

Whether we have been guided by others or forced by circumstances to

observe higher business ideals, we should give them recognition in our everyday practices, in the instruction of our employees, so that our individual enterprise will become known for our standards as well as for our service.

NEWS IS WELCOME.

Occasionally a reader, in sending a subscription renewal, adds a paragraph about his business operations or a change, "in case you are interested in news of this kind." Sometimes a letter will come, or a newspaper clipping, as often about a neighboring nurseryman as the sender, with an apologetic inquiry whether the editor wants such items.

Definitely he does, for subscribers are interested in reading the news of other nurserymen's operations, improvements, additions, changes, etc. Since most units in the field are widely scattered, in rural and suburban areas, off the path of any professional news gatherers, many interesting items will only find their way in print if the readers will contribute news about their own enterprises to these columns.

In other fields, trade papers are flooded with publicity releases. But no one will ever accuse nurserymen of being publicity seekers, or "news snatchers." The editor has yet to find one of the readers of this magazine to which that term might be applied.

With this assurance, it is hoped that subscribers will feel no hesitancy about sending in items of news, about either themselves or their neighbors in the trade. Such items are always welcome.

NEW ENTERPRISES.

All over the country, veterans, former war workers and others have come to the conclusion that the right time has arrived to start in business. According to Dun & Bradstreet, Inc., the net gain in new firms—the difference between the number closing down and the number opening up—increased from 9,900 monthly in September and October of last year to 23,800 monthly in January and February. In many fields they will replace the great number of service and retail establishments that closed during the war.

ROBERT KING expects to go into the nursery business at Roscoe, Cal.

National Garden Conference

While nurserymen, landscape architects, homeowners and civic organizations have looked forward with the return of peace to concentrating on a much-needed program devoted to home and community beautification and improvement, it is now evident that first an emergency program must be immediately undertaken to alleviate food shortages abroad and to avert the widespread and disastrous results of famine. Therefore the National Garden Conference called by Secretary of Agriculture Clinton Anderson was held March 26 to 28 at Washington, D. C., with the twofold purpose of remobilizing the wartime victory gardeners and laying plans for a broad continuing garden program, including home and community improvement. From all over the country came more than 200 garden leaders, representing the horticultural trade, horticultural and agricultural societies, colleges and schools, civic organizations, industry, the government and the press, who laid the plans to meet the food emergency and to undertake a nation-wide gardening program. Objectives of the National Garden Conference were presented by Paul C. Stark, conference chairman and director of the national garden program of the United States Department of Agriculture.

The six major problems confronting the conference were outlined by H. W. Hochbaum, vice-chairman of the U. S. D. A. garden commission and secretary of the conference: (1) An immediate victory garden program and its relation to the famine emergency program; (2) the conservation and use of food for home, community and famine relief; (3) a long-time garden program for America; (4) garden activity by youth; (5) home fruit planting for town and country, and (6) research needs of home gardeners. Committees were appointed to discuss these problems and to make recommendations. All committee recommendations were unanimously approved by the conference.

It was the consensus of the conference that the food emergency should receive first consideration and that every effort be made to remobilize the 18,000,000 victory gardeners of the war years, to increase this number to more than 20,000,000 and to give these food gardeners the full support, cooperation and aid of all government and nongovernment agencies and organizations. Equal aid, cooperation and publicity were recommended to further a national long-time garden

program to improve American homes and communities. Intensified research was asked to solve the problems of the home gardeners, especially in urban areas. Again a division of ornamental horticulture with expanded facilities and increased personnel was strongly recommended to the U. S. D. A.

Committee Recommendations.

A 17-point program was submitted by the committee to develop a long-time garden program for America under the chairmanship of Dr. McDaniels, of the U. S. D. A. This included (1) a national advisory garden committee to be continued and enlarged with the aid of various subcommittees



Paul C. Stark.

and maintained in close relation with the Department of Agriculture; (2) a national garden conference to be held each year not later than November 1; (3) a more intensive public relations program to disseminate information to the public and to promote a national garden program to be continued by the Department of Agriculture; (4) a series of home garden bulletins to be issued by the Department of Agriculture designed to reach urban communities and regional booklets to be issued by the extension services to meet local needs; (5) a division of ornamental horticulture to do research in the bureau of plant industry for urban as well as rural communities, with extended facilities and increased personnel; (6) the inclusion of fruit and vegetable production as a permanent phase of home gardening; (7) the increased improvement of home grounds with home gardening extended to a greater number of persons; (8) programs for

civic, community and rural beautification, with emphasis on outdoor living; (9) increased youth garden education and activities in both urban and rural areas; (10) increased encouragement of garden therapy work; (11) increased number and kinds of horticultural demonstrations, such as flower and garden shows, contests to encourage home and civic improvement, etc.; (12) coordinated land use studies to encourage the improvement of communities and homes and the removal of slum areas; (13) replacement of the word beautification by the term improvement in all garden programs; (14) encouragement of industrial gardening; (15) promotion of gardening among employees through business and industry; (16) widespread improvement of the appearance of and conditions in industrial districts, and (17) the inclusion by the FHA, and like agencies, of gardening as an integral part of building.

Robert H. Roland, executive secretary of the Society of American Florists, presented the following recommendations from the committee considering the research needs of home gardeners: More cooperation between the U.S.D.A. and the state and regional experiment stations on breeding and testing of fruit and vegetable varieties more adaptable for home gardeners in various climatic regions and likewise on the development of insecticides and fertilizers for home use; development by agricultural engineers to provide new tools, especially spray and dusting equipment, suitable for the small-scale gardener; further research in all types of ornamental plant materials suitable to home ground planting in all regions; equal emphasis on the problems of pathology, entomology, physiology and plant nutrition in breeding programs.

Pointing out that fruit production lent itself so well to all kinds of regions and types of plantings, the committee on home fruit planting for town and country under Prof. T. J. Talbert, of the University of Missouri, urged the development of better methods of handling fruit culture on home grounds, more information disseminated to the public on the best production practices for home fruit growing in local regions and emphasis on the importance of the physical benefits of gardening and the value of fruits in the diet.

A goal of more than 20,000,000 food gardens was the primary recommendation of the committee for an immediate victory garden program, of

which William L. Favinger was chairman. To reach this goal it was recommended that the food garden program be integrated with the famine emergency relief program; the aid of the agricultural colleges, extension services, gardening societies, civic agencies be enlisted to remobilize quickly the nation's wartime victory gardeners, abetted by a public relations program and information service through the press, radio, advertising and motion pictures. Studying the garden supply situation, the committee advised that there would be ample quantities of garden supplies and equipment, so that maximum results should be secured from home, community and industrial gardening efforts.

Miss Janet Cameron, chairman of the committee for the conservation of food for home, community and famine relief, presented a recommendation urging that everyone plant, preserve and store as large a share as possible of food needs; that the government agencies and local organizations cooperate in making available information on canning, preserving, freezing and storing through literature and practical demonstrations; that community storage facilities be made available; that a maximum amount of fruit be preserved with a minimum use of the sugar supply, and that the government provide emergency funds for the food preservation program.

After paying tribute to the youth of the United States for its cooperative efforts in gardening during wartime, Mrs. F. H. Brooks, treasurer of the Girl Scouts of America, read the recommendation of the committee considering garden activity by youth. Increased cooperation of all youth organizations was urged, continued camp gardening and crop rescue work were recommended, home gardening studies were advocated as part of the curriculum of the elementary schools and a course in agriculture for all teacher training programs; the Office of Education was asked to prepare garden teaching aids, and it was requested that all these recommendations be given to the Office of Education.

Program.

Reflecting the spirit of the conference, the stage of the Jefferson Memorial Auditorium was not only decorated with palms, but with the flags of the United Nations as well.

Secretary of Agriculture Anderson called on everyone to lend his efforts to a mighty garden campaign in 1946 and read a message from President Truman fully endorsing the objectives of the conference. In part, the President said: "As a nation, we can still

[Continued on page 43.]

VISIT RESEARCH CENTER AT BELTSVILLE.

The final day of the national garden conference was devoted to a field trip to the U.S.D.A. research center at Beltsville, Md., March 28, under the direction of Dr. Samuel Emsweller. With six acres of greenhouses and 1,400 acres of experimental land, it was possible to see only a fraction of the work in progress in the few hours available. Before touring the greenhouses to see the various research projects in progress, the group met in the center's auditorium to hear members of the staff describe the experiments that would be seen in the greenhouses.

Dr. Emsweller told of the research in ornamental crops, particularly of disease research with carnations and gladioli and showed the progress being made in developing a more durable type of Easter lily. Through the use of colchicine treatments it has been possible to make the chromosomes double and produce a flower with much thicker and tougher petals.

Dr. J. W. Mitchell, in charge of the program on hormone research, explained what the use of these growth regulators could and could not accomplish. With the use of minute quantities of these substances, remarkable changes in growth habits are accomplished.

Weed control work for lawns and gardens was explained by Dr. L. W. Kephart, who advocated 2,4-D as the real answer to the problem of broad-leaved weeds, such as plantain and dandelions. Although 2,4-D is innocuous to grasses, it is hoped that it may prove of value in solving the crab grass problem. For most satisfactory and large-scale weed control, Dr. Kephart recommended the California pre-emergence type of weeding program, by which the soil is prepared for planting and the weeds are allowed to grow fully before the desired crop is sown. Then the weeds are eradicated by the use of weed burners or chemicals and the crop seeds planted with as little disturbance to the soil as possible. This method may call for the development of planting machines which stab the seeds into the soil instead of plowing them into the soil.

Research on insect control was described by Dr. W. H. White. He said that rotenone was first choice for most satisfactory control and next best was pyrethrum. While DDT has been found a good control over house and animal pests, more research is needed before it can be widely used for agricultural purposes.

Much work is being done to find

better planting media under the direction of Dr. N. W. Stuart. Vermiculite, a mica material that has been tried for the past ten years at various experimental stations throughout the country and for the past two years at Beltsville, has given fine results. This material is now becoming available for commercial use. It comes in four grades, coarse, called S.F., and Nos. 1, 2 and 3, for finer grades, packed in sacks weighing about fifteen pounds and measuring about two and one-half cubic feet. The cost to the grower is about \$1.25 per sack. Vermiculite is manufactured by the National Zonolite Co., makers of home insulation materials, and is known under the trade name Terralite. Vermiculite has great water-holding capacities, so that watering is not required after planting. Plants grown in this medium showed exceptionally fine root systems.

Another project seen was that being undertaken to determine the breakdown and decomposition in plants caused by the absorption of DDT. Four types of soil were being used as planting media and DDT was applied in different strengths ranging from twenty-five to 1,000 pounds per acre. Plants grown in light soil showed the worst effects from DDT, while New Jersey muck soil gave good results.

Some of the many projects seen were those dealing with the effects of fungicides on strawberry plants, the development of disease-resistant varieties of potatoes, tomatoes, beans and onions, the development of hardier kinds of lettuce for the east and better blueberry varieties for commercial use.

The afternoon's tour was concluded with a short trip to the Bell plant quarantine station, where the push-button method of propagation developed by Dr. V. T. Stoutemyer was seen. In place of the usual greenhouse for propagating, a low wooden opaque house, mostly underground, was used. Benches line the walls and over them were placed fluorescent light tubes of various colors. Heat and humidity were also artificially controlled. Orange and pink lights have given better results than the white, while blue was not found suitable at all for rooting purposes. For rooting forty foot-candles of power was found adequate, while seedlings required two fluorescent lights of forty watts, or 800 foot-candles. A small propagating case is being developed for use by the home gardener in his basement. Made of Masonite, the case measures only 2x4 feet, and is heated by a small socket heater.

Insects and Diseases of Raspberries

By M. B. Cummings

A number of insects and diseases attack raspberry plants in the nursery, and some of them are transmitted to other nursery stock. For this reason inspection and certification are desirable as a matter of protection for the nurseryman and the purchaser of stock. Clean, healthy stock is much to be desired, as it gives satisfaction to all concerned. Certification, if well done, is a sort of guarantee, a "clean bill of health," and is the ideal condition. Mutual satisfaction is desired, and a satisfied customer is the best advertisement one can have.

In this article attention is drawn to five insect pests and three diseases, which are briefly described and illustrated.

Sawfly.

Raspberry and blackberry leaves are often damaged by the worm stage of the sawfly. The injurious stage in its life cycle is the worm, which is a small green caterpillar one-half inch long and is covered with numerous spines. These creatures strip the leaves by skeletonizing them into shreds, baring the ribs and veins. The adult is a fly about one-fourth inch long, with a wingspread of one-half inch. The body and wings are black, except some of the body segments, which are yellowish and rusty on the under side. The male fly is smaller than the female. The sawflies appear about the middle of May in the northeastern states and soon deposit their eggs under the skin of the leaf, forming white spots on the top surface. The young worms eat the tender foliage and later devour most of the leaf as indicated above. This pest may be controlled by spraying when there is no fruit on the plants with arsenate of lead (a tablespoonful to a gallon of water). The addition of a little fish oil (a few teaspoonfuls to the gallon) makes the spray more adhesive. Application should be made to the under as well as the upper surface of the leaves. See figure 1 for insect features of the fly and the worm and location of egg masses.

Cane Borer.

Wilting tips of raspberry stalks, as shown in figure 2, are signs of cane borer damage. The creatures eat out the center of the stalks, causing the stalks to die. The adult is a dark slender beetle, two-thirds of an inch long. The cane borer makes two rows

of punctures encircling the stem about six inches below the growing tip. The two rings of punctures are about an inch apart and in the short section between these rows the eggs are laid. The tip near the punctures wilts, droops and dies. Cutting off the infested part of the cane helps check the trouble. Near-by plants that are not cultivated require the same treatment. The cane maggot works in a similar way and requires the same treatment. But the adult of this species is a fly rather than a beetle and its worm stage is a maggot rather than a grub, as is shown in figure 3.

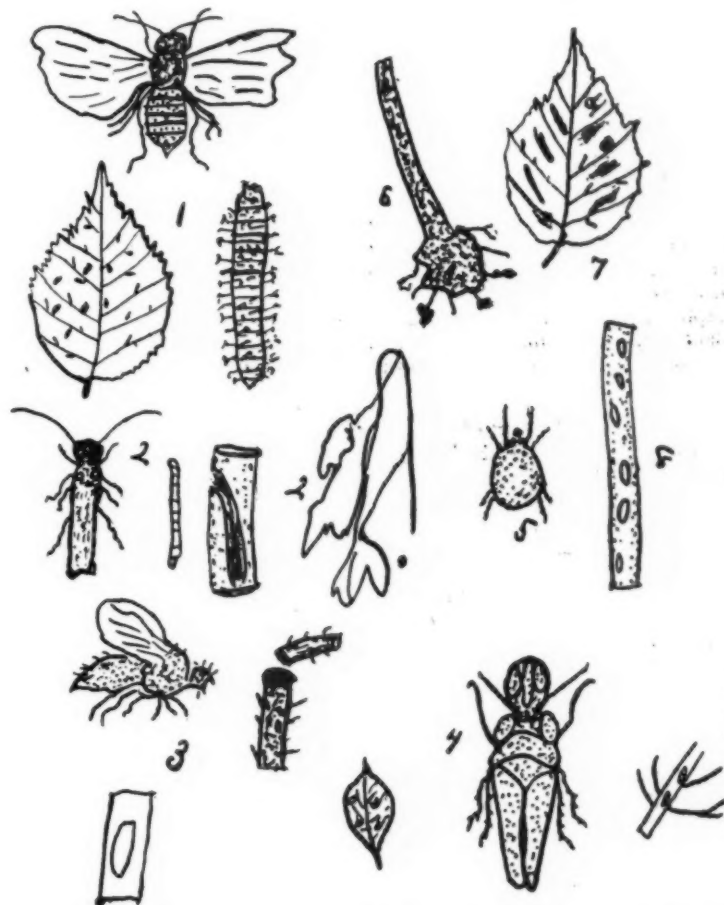
Leaf Hopper.

The name leaf hopper correctly characterizes the little creatures that hop and jump when frightened or

disturbed. They have sturdy hind legs, which enable them to jump several feet. The features of this insect are shown in figure 4. The hoppers come in June to the under side of leaves, where they breed and feed by sucking the juices. In a short time the leaves turn yellow (the brown burn of foliage known as hopper burn) and may die. Leaf hoppers, along with aphids and red spiders, distribute mosaic of raspberries and therefore need control for double reason. Nicotine sprays are effective if used early.

Red Spider.

The red spider, shown in figure 5, is a small reddish mite that feeds on the under side of leaves, causing them to curl, discolor and become covered



Legends of diagrams: (1) Sawfly—adult, spring caterpillar, eggs and leaf. (2) Cane borer—beetle, worm, canal and wilted cane tip. (3) Cane maggot fly—egg in cane and injured cane. (4) Leaf hopper—egg on leaf. (5) Red spider. (6) Root gall. (7) Mosaic with light and dark green streaks on leaf. (8) Cane rust scars with white centers and red edges.

with minute webs. Stems and fruits are sometimes attacked. The injury is done by rasping and sucking, which devitalize the leaves. A hand magnifying glass will reveal the creatures and the harm they do. Hot, dry weather favors the spiders; wet weather deters them. Dusting the under side of leaves with sulphur helps to keep the creatures under control. The stock flour solution (one pound of flour to one gallon of water) well stirred and sprayed on the under surface of leaves will kill most of the spiders.

Mosaic.

Mosaic is the most serious disease of raspberries and needs careful attention. It is characterized by a mottled condition of the leaves, with alternating green and light patches, illustrated in figure 7, a stunting of growth and some curling of foliage. The plants are inclined to be somewhat dwarfed in protracted cases, with lessened crop and poorer fruit. There are two forms, red and yellow mosaic, both of which are transmitted by plant lice and leaf hoppers, which inoculate healthy plants with the disease virus. Latham, Chief, Vining, St. Regis and Dike are nearly immune to this trouble; Cuthbert and June are quite susceptible and need rouging (culling out affected plants) two or three times in June, once in July and once in August each summer. Control consists in removing by pulling or digging and burning all affected plants and using land 200 feet from wild or other cultivated raspberry plants. Watch all healthy plants adjacent to diseased ones and eliminate them also if they appear infected.

Crown Gall.

Crown gall is recognized by the presence of galls or knots on the roots (see figure 6) and sometimes on the canes and by symptoms on the foliage somewhat like mosaic. Plants are weakened by the presence of this bacterium, which invades the tissue and causes the galls to form. As the gall decays the germ lives for some time in rotted tissue in the soil and causes reinfection under favorable conditions, such as open wounds. Control measures are confined to the planting of gall-free stock in gall-free land together with absolute destruction of affected plants. Latham is quite subject to gall.

Rust of Cane.

The rust disease of raspberry plants, also known as anthracnose, cane spot, gray bark, scab, etc., occurs in larger or smaller quantities wherever raspberries are grown. The

amount of damage or the losses incurred depend much on the weather, general sanitary conditions and the location of the planting.

Rust is recognized by small spots evenly distributed on the stems which at first are reddish-brown and are less than one-fourth inch in diameter. Later the spots have white, slightly sunken centers surrounded by a red ring, as in figure 8. On the leaves there may be small yellowish spots one-sixteenth inch in diameter, which turn red as they grow and elongate and possess a light-colored center still surrounded by a red ring. Prolonged rains, crowded plants and dense shade favor the disease. The scars on the stems are scattered over the cane and seem most abundant on the young and succulent stems. Infection occurs after rains, and the disease may spread rapidly.

Sometimes in June small, whitish spots one-sixteenth of an inch across appear on the leaves. These leaf spots later turn red as they enlarge. The leaf lesions are somewhat similar to those on the canes. While leaf infections do not usually cause serious damage, under certain conditions the fruit spurs may be defoliated. Anthracnose spots on the leaves may easily be confused with septoria leaf spot. However, the anthracnose spot is angular and light in color, whereas septoria spot is always circular and somewhat darker.

All the brambles are subject to anthracnose, and any or all of the aboveground parts of the plants may be attacked. The severity of the disease varies with different kinds of brambles. The black raspberries and trailing blackberries, such as dewberry, boysenberry and loganberry, are especially susceptible to injury, so much so that thorough control of anthracnose is practically a necessity for their successful production. Purple and red varieties of raspberry are more resistant to the disease than blackcaps, but spraying for protection against anthracnose is desirable.

Rust or anthracnose is caused by a fungus which lives in infected canes. In the spring small spores, formed on the lesions of the previous year's canes, are blown about and spread the disease to the young canes in wet weather. These infections produce thousands of spores, which are spread by summer rains to uninfested near-by plants. During the winter the anthracnose fungus lives under the bark of infected canes and spreads the disease the following spring.

Control of the fungus consists of spraying with lime-sulphur (one gal-

lon to fifteen of water) as the buds begin to break in the spring; then one week before blossoming with a 2-4-50 Bordeaux formula. Destroy affected plants or diseased canes by burning them. The "handles," or sections of old stems, on the plants of black and purple raspberries and trailing blackberries should be removed at planting time to avert any risk of the spread of the disease from these to new shoots. The removal of the fruiting canes as soon as the berries are harvested may aid in the control of anthracnose, but it is not adequate in itself. Spraying is the most satisfactory method of controlling anthracnose. A spray applied just as buds are opening in the spring is most effective. Unless this spray is made, control is not likely to be satisfactory. With black and purple raspberries and the trailing brambles, another spray is advisable when weather conditions do not make spraying unsafe.

The application of sanitary measures is the most practical way of controlling most of the diseases and insects of brambles and in many cases the only means. Eradicate all wild plants and stray bushes in the vicinity of cultivated patches and destroy heavily diseased plantings before establishing new ones near by. Prunings should be removed from the field and destroyed.

EXTENSION HORTICULTURISTS FORM NATIONAL ORGANIZATION.

The National Association of Extension Specialists in Horticulture was formed at Washington, D. C., March 27, by representatives from twenty states, assembled at the National Garden Conference. The organization, composed of specialists in fruit, vegetable or ornamental horticulture in the state extension services, will include representatives of all the forty-eight states. The group will hold periodic meetings for the exchange of information and teaching materials.

A. O. Rasmussen, of Pennsylvania State College, was elected chairman of the organization and James Dutt, of the same institution, was chosen corresponding secretary. Fred LeCrone, Oklahoma A. & M. College, will be vice-chairman of the fruits section; R. O. Monosmith, Mississippi State College, will be vice-chairman of the section for ornamental horticulture, and Flood Andrews, Virginia Polytechnic Institute, will be vice-chairman of the vegetable crops section. Lee A. Somers, University of Illinois, was chosen secretary.

A Swing Around the Hemlock Circle

PART II.

By John C. Swartley

At the Bristol Nurseries, Bristol, Conn., Alex Cumming showed us a hemlock variation that had been observed in the nursery several years before and also some grafted plants that were 3 years old. It is a bushy, graceful plant with plumelike foliage. Mr. Cumming said he expected to test it thoroughly before propagating it to any extent. More nurseries might copy the example of the Bristol Nurseries in this respect. Some are inclined to push untested varieties of plants that prove later to be of no particular value or too closely resemble existing varieties. Woody plants probably require fifteen to twenty-five years of propagation and observation before one can be sure as to their relative merits, and with some, their true character. This is a long time, but considering the large number of varieties of some species now in the trade, another hundred years of slipshod introductions will certainly multiply any present complications. We should do well to emulate the example of the pomologist who figures on testing any given variety of apple for at least twenty-five years before introducing it as a new variety. This means that only a few of those tested are ever introduced.

Last August, Ralph E. Warner, a schoolteacher of Milford, Conn., had brought to Far Country a small plant of Carolina hemlock that promises to be not only spreading but weeping. Knowing that he had selected some other variations, we visited his woodland home. Mr. Warner proudly showed us, among other things, several lush cones on a small plant of Sargent weeping hemlock. The previous spring, he had checked on the flowers of hemlock at the proper time and found good pollen



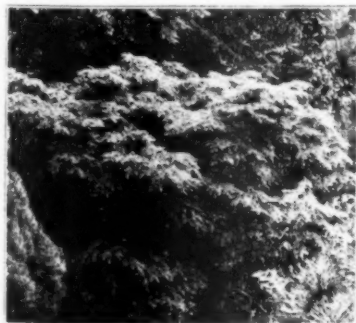
Tsuga Canadensis var. *Bradshaw* at Kingsville Nurseries.

on only one plant in his collection, a small compact plant received from George L. Ehrle. He severed a few male flowers, exposed them to a bit of heat overnight and next day pollinated some female flowers on the Sargent weeping hemlock. The operation was apparently successful, but still needs confirming through germination.

The South Wilton Nurseries, South Wilton, Conn., is one of the few places that cannot be missed if one is interested in variations of hemlock. Jacob C. Van Heiningen has a keen eye for plants and also knows how to grow them. He is a stickler for detail and insists on growing plants right even though he knows he is going to lose money on them. He has demonstrated the method of growing Hicks' yew, trained to one leader, so that the plant at maturity does not have the poor structure of Hicks' yew grown in the usual way. He decries the landscape architects who insist on *Juniperus communis depressa* because it is a native, but will not use *Juniperus squamata*, which is a better plant and is rarely bothered with juniper scale. But to get back to hemlocks, the prize is a compact plant about twelve feet high, with good foliage and graceful habit, the lower branches lying on the ground. This had evidently been missed in the survey of 1938 because the plant was below eye level and did not attract a second glance. Above eye level, it cannot be

overlooked, since it is a strikingly beautiful plant. A smaller plant was grown from a layered branch and, of course, possesses the same character, but is not so striking because of its smaller size. Some of the variations remembered from the previous visit were either dead or in bad condition, since the climatic conditions are not suitable here for growing hemlocks. However, the two contrasting seedlings of Sargent hemlock, now 30 years old, are still in good condition.

The Outpost weeping hemlock is the fastest growing of the weeping hemlocks, averaging more than a foot a year increase in height. It originated in the Outpost Nurseries, which have been reorganized and are now the Woodcock Nurseries, Ridgefield, Conn. The larger grafted plants in the nursery now average ten feet in height; therefore its habit is well established. It is a gracefully weeping tree. This visit was of especial importance, since in 1938 the original plant had been severely pruned for scion material and the grafted plants were too small to be a reliable indicator of the eventual character. The Redding hemlock, a dense-leaved type, has been propagated here, but has not much horticultural value. Some mystery is attached to this clone. A plant of Redding hemlock was presented to Cornell University Arboretum and another to Far Country in 1939. These two plants have grown more rapidly than the plants remaining in the nursery and have more widely spaced leaves, no longer falling in the dense-leaved



Original Plant in this Country of var. *Nana*, at Eatonton, N. J.



Grafted Plant of Outpost Weeping Hemlock, about 10 Feet High and 12 Years Old.

category. Does anyone know of other plants of the Redding hemlock, sold, presumably, as the Outpost hemlock?

Clarence McK. Lewis, of Skylands Farms, Sloatsburg, N. Y., asked me several years ago to visit him and check the identification of the plants in his hemlock collection. This was the first good opportunity to satisfy the request. The hemlock collection has been suffering on two counts. Most of the plants are growing in shade in soil lacking in humus. Those vigorous enough to grow under these conditions have been drastically trimmed by hungry deer in the winter. The moral is to grow hemlocks in full sun with sufficient humus in the soil and protected from deer if they happen to present a problem. In the Pocono mountains of Pennsylvania, deer rarely feed on hemlock, but have a great liking for yew. The New York deer are apparently more hungry and less particular in their diet.

Two plants, not observed in other collections, are of interest. One was received from Howard E. Andrews about ten years ago with the name "minuta nana." This clone is very similar to the one named var. *cinnamomea* by Frank L. Abbott and is not in any way related to var. *minuta* distributed by George L. Ehrle. Another plant that is a selected seedling at Skylands Farms is a spreading plant similar to one that originated in the Curtis Nurseries.

On the way south, the collection of George L. Ehrle, near Clifton, N. J., was hurriedly inspected. Mr. Ehrle had generously donated the most important part of his collection to the Hemlock Arboretum at Far Country in 1942, and the type plant



Tsuga Canadensis var. *Compacta*.

of var. *minuta* has since died. But we found several minor variations and a witches'-broom that were worth checking. Mr. Ehrle is also responsible for disseminating a choice spreading hemlock under the name of "minima," but var. *nana* is considered a more authentic name. It has also been referred to as the Bennett hemlock. In order to observe the original plant, we traveled to the former home of Ralph Lott, near Eatontown, N. J., the property now belonging to Allison Stern, who also owns the near-by farm. The plant is now about four feet high and eight feet across. It is not only spreading, but has a distinctive delicacy of foliage that is unusually attractive. Unfortunately, the plant is in a small rock garden and is badly crowded.

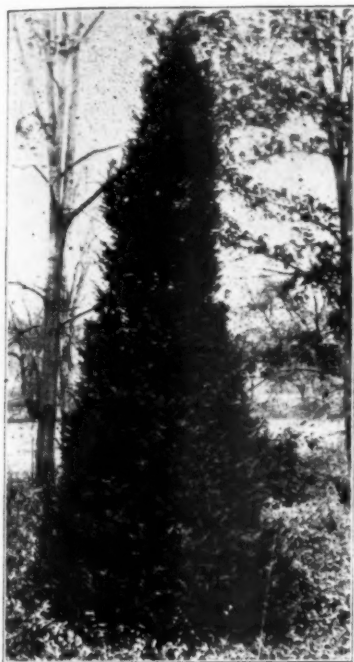
In 1938, M. G. Coplen, of the Rock Creek Nurseries, Rockville, Md., was propagating a narrow pyramidal hemlock that looked promising. A recent visit to the nursery was well repaid. Although grafted plants are not so compact nor so narrow as the original plant, they are of definite merit. They thrive on the poorest of soil, provided the drainage is satisfactory, and retain a good color. The lower branches lie right on the ground and the habit is more narrow and compact than that of the ordinary hemlock, suiting them for foundation plantings and small hedges with perpendicular sides. Because of the slower growth, Mr. Coplen has successfully used plants of this clone in place of *Taxus cuspidata capitata* with less attention to pruning. The oldest grafted plants are more than 15 years old and about eight feet high.

Mr. Coplen is one of the few nurserymen who are enthusiastic about the commercial possibilities of hemlock varieties. For one thing, he has no complaints to make about growing plants from grafts. He grafts the hemlocks himself and his technique is superior. He has had no success in rooting cuttings of the pyramidal plant, probably because his house is too cool to profit by the synthetic growth substances. Another variation roots readily without treatment, by the way, in flue ash. This ash, remaining from the burning of particles of soft coal in the chimneys, is obtained from the Walter Reed hospital and is used exclusively for the propagation of all kinds of cuttings. Wonderful root systems are produced and it is virtually impossible to overwater. Only a few plants are affected by the nature of the material.

North of Baltimore, a stop was made at the Kingsville Nurseries, belonging to that indefatigable plantsman, Henry J. Hohman. Mr. Hohman is still enthusiastic about the extremely narrow plant that he has called Kingsville. He has been clipping it severely for a number of years in order to provide scions for propagation; therefore there is reason for the narrow habit. Grafted plants are sparsely branched, not narrow, and the branching is certainly not fastigiate. A more useful hemlock, in my opinion, is the clone Mr. Hohman has named Bradshaw. This is a broad compact hemlock that responds beautifully to clipping. A clipped plant is probably more beautiful than one that is not clipped. It could be well recommended to those individuals who delight in shearing plants regularly.



View of Hemlock Arboretum at Far Country.



Original Plant of var. Coplen at Rock Creek Nurseries, 7x14½ Feet.

In January, 1946, it was necessary to visit Cornell University in order to confer with the authorities concerning the details of the proposed bulletin. In connection with this trip, it was possible to revisit the large globe hemlock at Geneva, N. Y. It has changed little in the past eight years and can still be recommended as a promising clone. However, we still do not know what shape young plants will have, since the cuttings rooted at Cornell University did not survive. Material for cuttings and scions was again collected. Near Ithaca, the site of the large witches'-broom, about a mile above the entrance to the Lower Enfield state park, was visited and an attempt was made to get a better picture. The foliage is not much different from ordinary hemlock, but the sight of a compact mass about eight feet high and about as wide, perched on the top of a tree thirty feet high, is quite extraordinary.

While on the way home, we were attracted to a broad compact and attractive hemlock growing on the front of a large lawn on route S31 on the outskirts of Milford, Pa., between the main route and the Delaware river. This plant contrasted quite sharply with the plants of ordinary hemlock growing on the same lawn. At Greentown, Pa., we stopped to inspect a hemlock that had a generous sprinkling of golden leaves in 1938. Now it is possible to see only a trace of the golden color. A seed-

ling from this tree, which originally had golden tips, has been the subject of much debate in the Hemlock Arboretum bulletin. A year or more after it was brought down from Pike county the gold had entirely disappeared. Changing soil conditions probably account for the fading of the color.

It is now in order to make a few observations about the collection at Far Country. Almost without exception the plants are healthy and vigorous. Although the accession numbers are now past 200, all of the plants of any importance are accounted for, and damage from overcrowding in the trial beds has been negligible. It is not only the largest, but undoubtedly the best kept, hemlock collection in the world, and well worth visiting. Charles F. Jenkins says the latchstring is always out for interested visitors. During the week it is advisable to call his office at Philadelphia before visiting the arboretum.

Some pertinent observations can be made about certain plants in the collection. The var. *jenkinsi* is the fastest-growing small-leaved hemlock, but has not proved itself to be a dependable grower. The trouble is still obscure and may be overcome.

An unusual plant, observed in LaBars' Rhododendron Nursery in 1938, was decidedly columnar, eight feet high and about three and one-half feet broad. It was transplanted to Far Country in 1939 and since that time has gained less than a foot in height but more than two feet in breadth; so the proportions are now totally different. The habit of growth of lateral branchlets is still the same, forming more or less straight sides without clipping. We shall have to propagate this plant and observe the development of the progeny before we can be sure of the character and merits of this clone. A grafted plant from the Boulevard Nurseries, Newport, R. I., is now six and one-half feet high and about 12 years old. The leaves are large, but not crowded, and dark green. The slow growth, dark color and graceful habit should make this plant useful in landscape planting. Grafted plants of vars. *cinnamomea* and *taxifolia* are developing well and are certainly decorative. They are especially good for rock gardens. The foliage of var. *taxifolia* is represented in a free-growing plant from the Valentine Nurseries, Cosby, Tenn., interesting enough to bear watching. But one of the most striking plants, from the use standpoint, is a 12-foot high specimen of the Pomfret hemlock, distributed as compacta by the

Adams Nursery, Springfield, Mass. This clone does not attain its full beauty until it approaches a height of ten feet. The upsweeping branches disclose the bluish-white lines on the undersides of the leaves, producing an unusual effect. According to Charles Adams, the plant is entirely hardy.

One of the objects of this hemlock odyssey was to encourage nurserymen to propagate more extensively these rare and notable variations of the genus *tsuga*. There will be an increasing demand for these for ornamental planting, and so far prospective purchasers have found it difficult to obtain nursery stock. Heretofore, a nurseryman finding a little stranger in his row of *Tsuga canadensis* has had to throw it aside, as not conforming to the type, for it was too bothersome to care for it. Fully half the specimens in the Hemlock Arboretum at Far Country have been gifts from nurserymen, who, discovering something different in their nursery rows, have taken the time and trouble to save it and send it where it would be personally observed and cared for.

R. T. NELSON has joined the staff of the Gilmore Gardens, Albany, Ore., having charge of landscaping, shrubbery and the planting department. Mr. Nelson, a graduate landscape architect and horticulturist, spent nearly five years with the armed services. Mr. and Mrs. Lyle Gilmore have erected a new greenhouse on Broadway and have leased seventeen acres adjoining Willamette Memorial park for nursery purposes.



Typical *Tsuga Canadensis*, about 75 Years Old in Montgomery County, Pennsylvania.

Nurserymen Exhibit at Spring Shows

Spring flower and garden shows, omitted or curtailed during the war, are coming back, with increased participation by the trade and still greater interest demonstrated by the public. These facts were evident from the March exhibitions this year, though the time for preparation after the end of the war was less than usual. Another season will doubtless see the spring shows in the principal metropolitan centers again in full swing.

Showing the war's effect, the March displays at New York and Boston revealed less support from private estates because of their curtailed operations and staffs. Cut flowers played a more prominent part than formerly, because they were abundant in supply, while materials for gardens had not yet become readily available.

Yet the quality of the gardens was high at these exhibitions, as will be noted from the following descriptions. These brief notes are concerned chiefly with nurserymen's exhibits and garden displays at the March shows.

Seventy-fifth at Boston.

The New England spring flower show, in Mechanics building, Boston, Mass., March 18 to 23, celebrated the diamond jubilee. The first spring flower show of the Massachusetts Horticultural Society was held seventy-five years ago in a tent. Since that time it has been an annual affair, wars, weather and economic conditions notwithstanding.

The diamond jubilee theme was evident in a few of the major exhibits, but it did not dominate the show. One of the pleasing features

of the entire display was the variety of originality of the individual exhibits. In addition to the gardens of seventy-five years ago, there were a Chinese garden, a California acacia garden, a war memorial garden, a cactus garden, herb gardens, woodland gardens, a kitchen garden and others embarking on their own theme.

The flowering trees and shrubs were well timed for the show. The old favorites, dogwoods, lilacs, spiraeas, flowering almonds, azaleas, laurel and rhododendrons, were all there, in addition to a few kinds less used for forcing.

The president's cup for the most meritorious exhibit in the show went to Bay State Nurseries, North Abington, Mass. The exhibit was a memorial garden covering approximately 3,000 square feet, and the motif is probably best described from a bronze plaque which was embedded in a rock at one corner of the garden: "This living memorial garden is dedicated to all who gave their lives in the service of their country." The focal point of interest in the garden centered around a terrace with fountain and pool, with a feature seldom seen in a garden show exhibit—an American flag and an American Legion flag staffed at either end of the pool. The background was made up of evergreens. Some of the plants especially noted were daphnes, *Pieris floribunda*, lilacs, azaleas, fothergillas, rhododendrons and dogwoods. Bay State Nurseries also won a special prize for this garden.

The well known acacia collection of the Galen Stone estate, Marion, Mass., was used in developing a California garden across the stage and

down to the floor of the main hall. The acacias alone in any kind of grouping would have provided a meritorious exhibit. However, they were worked ingeniously into a hillside planting that started well out onto the floor of the hall and extended to the rear of the stage. The sense of distance was further developed by the use of a special background screen lighted from the back. The quality of the acacias in the exhibit was attested by the award of the gold medal certificate of the Pennsylvania Horticultural Society for the exhibit in the entire show with the highest standard of culture.

The gold medal certificate of the Horticultural Society of New York for the most beautiful exhibit in the show went to Mr. and Mrs. John S. Ames, North Easton, Mass.—R. G. Chamberlain, gardener—for a Chinese garden.

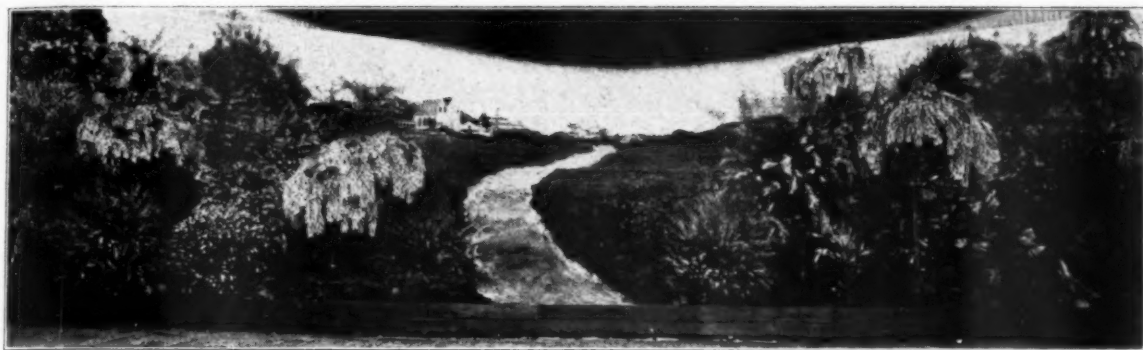
Several huge potted azaleas, judiciously placed in the garden area, were plants brought to this country many years ago from China by E. H. Wilson, of the Arnold Arboretum, and were massed with blooms at show time last week. Above the azaleas rose a huge, gnarled pine.

The Chinese garden, as well as another gold medal winner, the 1870 garden of the Frost & Higgins Co., Arlington, Mass., was designed by Frank W. Sellner, landscape architect. The latter garden was developed around a colonial dooryard, employing architectural frills and carpet bedding of that era. Even the walk was used to carry out the patterns set by the coleus varieties in the beds, through the use of two gravels of contrasting colors.

Two other gardens set up in the



Garden of Weston Nurseries, Inc., at Boston Show Used *Pachysandra* as Ground Cover Instead of Grass Lawn.



Acacia Collection from Galen Stone Estate Used to Create California Scene at Spring Show at Boston.

main hall were those of the Cherry Hill Nurseries, West Newbury, Mass., and Weston Nurseries, Inc., Weston, Mass. The latter exhibit showed a real gardening achievement when two large areas were planted with pachysandra as a ground cover in lieu of grass, and the hundreds of plants that went into it were so well selected and placed that it had the appearance of an old-established planting.

An exhibit which aroused plenty of curiosity was the 1870 garden of Sherman Eddy, Avon, Conn. It was an old-fashioned dooryard, replete with a fringe-topped surrey, split rail chestnut fence, steps and a hand-cranked wooden well. White lilacs, other old shrubs and daffodils were used in the garden, which won a special premium.

Lexington Nurseries, Lexington, Mass., displayed an annual garden that had a strong appeal to many home gardeners, perhaps because it appeared to be easier to achieve than many of the more intricate gardens. Formal, neatly trimmed beds were planted with the popular annual flowers and greenhouse-grown bedding plants. It was awarded a gold medal.

F. I. Carter & Sons, Tewksbury, Mass., was the recipient of several

awards, including a gold medal, for a cactus garden. All of the plants in the garden were neatly labeled, thereby adding considerably to the educational value of the exhibit.

The two herb gardens in the show were staged by Greene Herb Gardens, Greene, R. I., which were awarded a silver medal, and St. Briavel, Gloucester, Mass. The latter garden, in addition to the culinary herbs, contained a good collection of scented geraniums.

Gardens in woodland settings were exhibited by Harlan P. Kelsey, Inc., East Boxford, Mass., which won a gold medal; Will C. Curtis, South Sudbury, Mass., and Van's Nursery & Landscape Service, Fairhaven, Mass.

New York Show Resumed.

The first flower show at New York in four years was held at the Grand Central Palace, March 18 to 23. Conducted by the Horticultural Society of New York and the New York Florists' Club, it was the thirtieth International flower show.

Azaleas, large and small, provided the bulk of color in many of the gardens. They were well grown and well timed for the show. The spring bulbs were not abundant, but there were

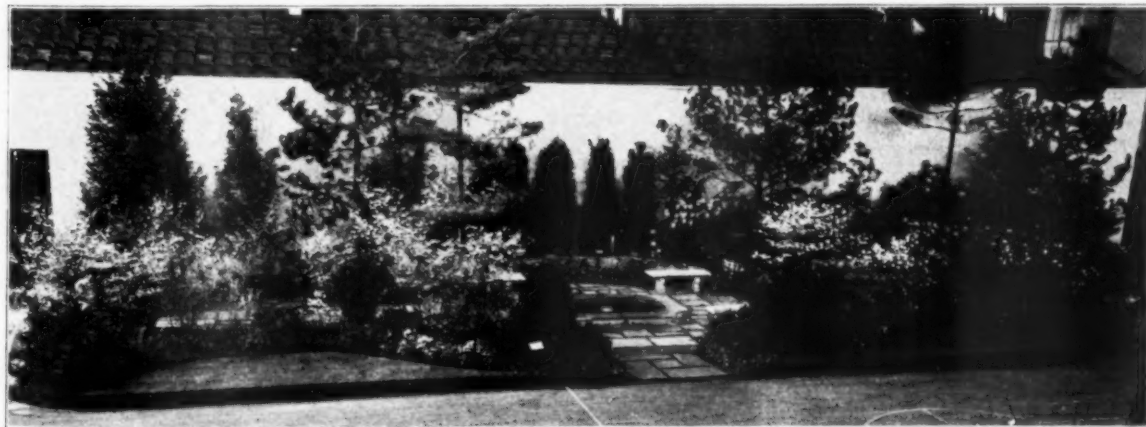
some tulips of exceptionally fine quality and also some well grown narcissi.

The gardens were largely in the hands of the commercial establishments this year, with fewer private growers or estate entries than in pre-war years.

Four years had not dulled the growers' touch for timing some of the special flower show plants. This was particularly evident in some of the larger woody plants, and there were some fine specimens of dogwoods, magnolias, lilacs, forsythias, spiraeas, laurel and rhododendrons brought in just right for the show.

The green and white garden of Stump & Walter Co., New York, was one of the highlights of the show. White tulips were growing in narrow circular strips around a round pool, and these blooms, together with their reflections in the pool, provided the center of interest for the garden. Other notes of white appeared in border clumps of azaleas and in overhanging white dogwoods. The tulip beds were edged with dwarf boxwood, and clipped yew hedges outlined the boundaries of the garden.

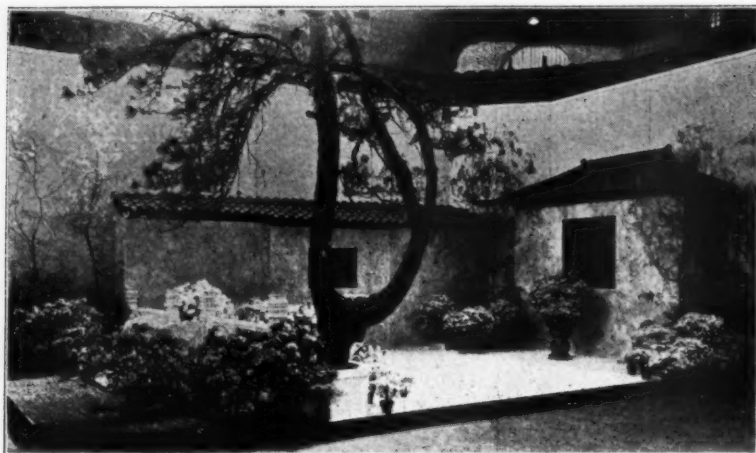
Bobbink & Atkins, East Rutherford, N. J., used the firm's splendid collections of azaleas to good advantage in developing another of the



War Memorial Garden Staged by Bay State Nurseries at Boston Show Won the President's Cup.

large show gardens. Huge plants of yellow and flame-colored azaleas were banked into the green background to strike the predominant note of the garden. These were carefully tapered down to smaller azaleas and interesting border plants. Andromedas, English primroses, dornicums, bleeding hearts and dwarf irises were some of the spring flowers in the border. Inconspicuous but legible labels enhanced the display for those note-taking gardeners who like to know what they buy.

In another smaller garden, joining their large garden, Bobbink & Atkins had a spectacular exhibit of rutherfordiana azaleas.



Chinese Gardens of Ames Estate at Boston Show.

The two gardens were arranged so as to provide a long vista, running the length of the two gardens.

The Julius Roehrs Co., Rutherford, N. J., in developing a large southern garden, did a good engineering as well as landscaping job. The entire garden was elevated about three feet above the level of the floor, and a brick and mortar wall of that height had to be used to finish off three sides of the exhibit. The unusual elevation accomplished two purposes—a perspective different from that of the other gardens was provided, and it was possible to bring in large balled and burlapped trees to use anywhere in the garden. As a matter of fact, the effective use of magnolias and flowering fruit trees along the garden walk was one of the most delightful features of the entire show. Hundreds of narcissi, along with tulips and azaleas, were planted beneath the trees along the walk.

Daybreak Nurseries, Westport, Conn., had two gardens in the show, one large and one small. In both gardens, interest developed about a summerhouse, and both were characterized by the use of large woody

plant material forced for the show. Flowering dogwood, lilacs, laurel and flowering apple were some of the plants that the firm had succeeded in timing for the show.

The only dooryard planting in the show, perhaps because of the shortage of building materials, was presented by Brookside Nurseries, Darien, Conn. The pathway leading to the door was attractively flanked with white dogwood, lavender lilacs, white azaleas and a low border of English primroses, wallflowers, forget-me-nots, dornicums and bleeding hearts.

Turner Bros. Nursery, West Long Branch, N. J., developed a comparatively simple garden corner or out-

the subject of plant growth hormones and showed how they are now being put to use in several horticultural practices.

A special trophy of the International flower show was awarded to Turner Bros. Nursery, West Long Branch, N. J., for a garden covering 650 square feet.

A silver medal certificate went to the Julius Roehrs Co., Rutherford, N. J., for its garden covering 1,200 square feet.

For its garden covering 1,200 square feet, the Stumpp & Walter Co., New York, received both the Bulkley gold medal for outstanding achievement and the Totty Memorial gold medal for outstanding horticultural achievement.

For his rock garden covering 600 square feet, Zenon Schreiber, Paramus, N. J., was awarded the gold medal of the Massachusetts Horticultural Society for achievement in horticulture, the gold medal of the American Rock Garden Society for the outstanding rock garden and the gold medal certificate of the International flower show.

Daybreak Nurseries, Westport, Conn., were awarded a silver medal certificate for a garden covering 650 square feet.

Cleveland Show.

The Greater Cleveland home and flower show was held in the Public Auditorium, Cleveland, O., March 16 to 23. Paid attendance records reached 150,000, undoubtedly proving that after the 4-year lapse since the last show in 1942 Clevelanders were eager to see the beauty displayed for them.

The main arena was transposed into a huge garden setting, with a rambling one-story model home as the focal point. Assembling and arranging of the floral exhibits which made the show the most beautiful of the year were done by the Florists' Association of Greater Cleveland, under the capable chairmanship of Homer Fox.

Landscaping around the prize house was simple, with tall red pines and other evergreens in keeping with the architecture of the house. Yellow tulips were planted in beds edged with variegated geraniums, adding color to the evergreens planted beneath the windows of the living room, dining room and kitchen. Beds of blue and white hyacinths lined the flagged walk to the terrace entrance of the house. Evergreens twenty-five feet high formed the background planting for the house and framed the silhouette of downtown Cleveland's sky line. Forsythias were used

door living room. It was built around intricate white iron garden furniture with a background of hemlock and broad-leaved evergreens. Large pink-flowering dogwood provided a canopy, and pink and white azaleas edged with the blue muscari added a pleasing color touch at the lower levels.

Dauernheim, Inc., Wantagh, L. I., put in a special azalea garden which was given a special award by the judges.

The rock gardens of yesteryear were represented by just one entry. What was lacking in quantity was more than made up by the quality of the garden staged by Zenon Schreiber, Paramus, N. J. A superb job of arranging the rock outcropping and the waterfalls was matched by the choice selection and use of the plants in the garden.

The New York Botanical Garden had an exhibit stressing the importance of science and knowledge in connection with plant life. This theme was developed by showing the economic value of some of the lower forms of plant life.

The Brooklyn Botanic Garden took

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in the evergreens to lighten the background and add a touch of spring.

A woodland scene displayed by Louis Hahn & Son, Pittsburgh, Pa., attracted much favorable comment.

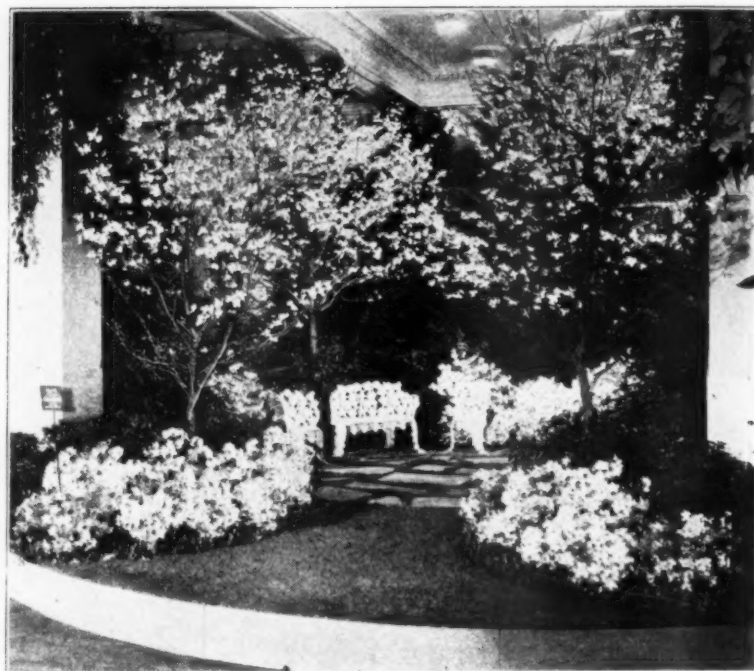
SALUTES TREE SURGEONS.

The radio show called the Valley Forge Caravan, broadcast over KYW, Philadelphia, offered tribute to what was called in the script "the tree surgery industry" March 20. The one-hour radio show delivers a salute each night to one of America's industries under the sponsorship of the Adam Scheidt Brewing Co., Norristown, Pa. On the evening of March 20 the guests of honor were officers of the Davey Tree Expert Co., Kent, O., Martin L. Davey, president; D. H. Fowler, assistant to the president, and Martin L. Davey, Jr., company executive. The short script told something about tree care and the tree experts' services.

TANKARD STARTS OWN FIRM.

S. D. Tankard, Jr., resigned his office as secretary-treasurer and manager of the Howard-Hickory Co., Hickory, N. C., effective April 1 and will establish the Tankard Nurseries at Franktown, Va., at once. The new venture will be principally a wholesale nursery, with a general line of ornamental stock, but featuring Kurume azaleas. He will soon be planting about 40,000 azaleas, and 20,000 to 30,000 evergreens, shrubs and trees.

The location at Franktown is on the eastern shore of Virginia, the



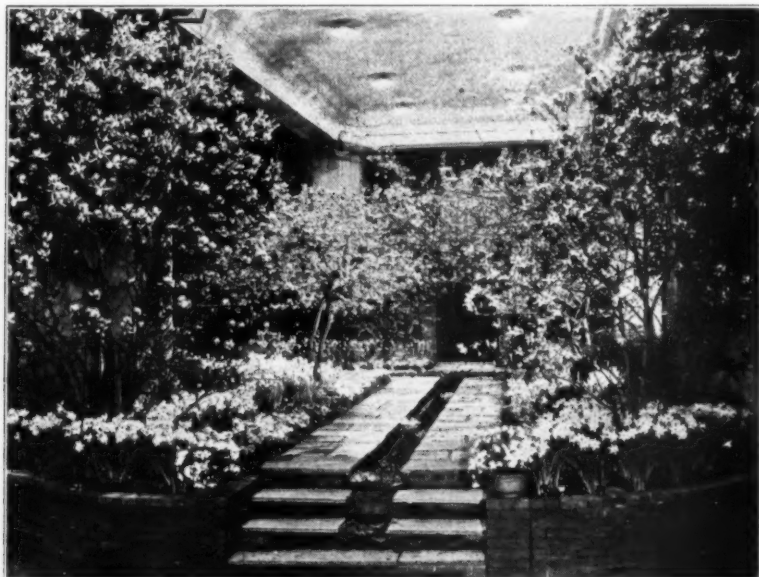
Garden of Turner Bros. Won Special Trophy at New York Show.

southern tip of the Del-Mar-Va peninsula. Mr. Tankard lived there until moving to Hickory, almost nineteen years ago. He became manager of the Howard-Hickory Co. in 1933, succeeding M. E. Throneburg, who had succeeded Joe Howard, organizer and founder of the nursery.

Most of the stockholders of the Howard-Hickory Co., including Mr. Tankard, recently sold their holdings at a price above par to Harley F. Shuford, Hickory manufacturer, who

thereby gained controlling interest in the company.

William H. Howard, son of the original manager, assumed that position April 1, to succeed Mr. Tankard. Presumably some of the company's land will be used for industrial purposes. New acreage may be secured to take the place of that which is disposed of. The firm's future seems bright at this time, since it has a good stock of valuable plants, in fruits and ornamentals, at a time when demand is strong.



Southern Garden Walk, by Julius Roehrs Co., at New York Flower Show.

PENNSYLVANIA NOTES.

At a meeting of officers and the executive committee of the Pennsylvania Nurserymen's Association, March 6, it was decided to hold the summer meeting at State College either on August 6 and 7 or on August 7 and 8, if satisfactory arrangements can be made. If that cannot be done, then the meeting will be held at some point west of the Susquehanna river.

A membership drive will be carried on under the general chairmanship of Frank D. Moore, Jr., with subcommittees in most of the counties of the state. It is hoped that the funds of the association may be increased in this manner, without the necessity of raising the current schedule of dues.

Owen B. Schmidt was selected as chairman of the executive committee. Albert F. Meehan was reappointed secretary-treasurer.

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No. 1 sets, 6 to 8-in. lengths	\$0.50	\$1.00	\$2.50	\$20.00

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Newburgh (red), No. 1	1.00	2.00	6.00	50.00
St. Regis (red), No. 1	1.00	2.00	6.00	50.00
Sunrise (red), No. 1	1.00	2.00	7.00	60.00

BLACKBERRY PLANTS

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Blowers, No. 1, R. C.	\$1.00	\$2.00	\$6.00	\$50.00
Alfred, No. 1, R. C.	1.00	2.00	6.00	50.00
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2 to 3 ft.	3.00	25.00

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Plant Notes Here and There

By C. W. Wood

The mention of an arctic willow in several plant lists during the past few years makes one think that interest is being shown these charming little plants. The term arctic willow without an accompaniment of its botanical name does not tell one much, however, for the willows form a dominant part in the woody flora of those regions. I have no idea how many willows have been accounted for within the Arctic Circle, but the floras (Britton's, for instance) give a dozen or more growing from the latitude of Labrador northward. It might be *Salix tristis*, which is not arctic at all, but is found in eastern North America. No doubt the name arctic, when applied to it, comes from an association of ideas, as when we think of an arctic willow as being dwarf and depauperated. In any case *S. tristis* is dwarf enough to qualify for the role, rarely growing over a foot tall. It is, in its diffuse growth, pretty gray branches, handsome catkins with their orange-red stamens, and ability to thrive in dry soil, an attractive ornament for the rock garden.

More than likely, though, the plant referred to is *S. herbacea*, a depressed matted shrub, usually not more than an inch or two tall. Its natural habitats in the arctic regions of Europe and America, south in the latter to the alpine peaks of the White mountains, tell us it is not so easily accommodated in the dry hot gardens of the eastern states. And that is true, though it is not too difficult where it obtains moisture at the roots. It is a lovely thing, as are most prostrate kinds, growing over rocks.

There are a score or more other dwarfs among the willows, a few of which have reached gardens, but they are so rarely available that mention of them would be merely irritating. There is one, *S. lanata*, however, which should be included in these notes. The floras available as these notes are written do not mention the plant; so I cannot say where it comes from or if it is available now. I saw it several years ago in a Connecticut garden, where it was prospering among the rocks on a southward-facing slope. There it made a lovely picture with its 2-foot bushes clothed in silky woolly leaves. Its owner said it was especially beautiful when its golden catkins were out in spring. In view of the fact that there are so many dwarf willows, few of which

are available to gardeners, it seems that they should offer opportunities for profits.

Nepeta Mussini.

Nepeta mussini, a catnip from the Caucasus and Persia, is one of the few plants that I try to get into these columns at least every other year. That is primarily because I consider it one of our most important landscape plants of its size. And the more I see of it in the myriad roles for which it is so eminently fitted the more I want to talk about it. Even if one confined its uses to the usual roles assigned it—as an ornament in the rock garden, for mass planting in forward positions in borders and as an edging plant—it would deserve the attention given it now, but it is ready to fill many other roles

in a landscaped garden, especially in color schemes.

Gardeners, and perhaps nurserymen, seem to have formed the opinion that it is one of the plants that can take care of itself. As a consequence, it is seldom seen at its best, because it is generally allowed to shift for itself. However, the fact that it will persist indefinitely under the most adverse conditions is no reason why it would not do better if given a little attention. Take the matter of the blooming period, for instance. Gardeners read that it is capable of producing color during most of the time from spring until frost and are disappointed when their neglected plants quit their merrymaking after their flush of energy has been spent in spring. If, on the other hand, it is cut back to new growths

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3 to 4 mm. 15.00
4 to 6 mm. 25.00
6 to 8 mm. 30.00

CELASTRUS SCANDENS,

Per 1000

Seedlings

1-Yr., No. 1 \$30.00

AMPELOPSIS VEITCHI

1-Yr., Heavy 12 to 18

ins. 175.00

C. R. BURR & CO., INC.
Manchester Conn.

BAGATELLE NURSERY

Growers of Azaleas, Beeches, Cornus,

Enkianthus, Evergreens,

Hybrid Lilacs, Ilex Crenata,

Kalmia, Malus, Prunus,

Rhododendrons and Shade Trees

Catalog on request.

P. O. Huntington Station, N. Y.

We Offer—

EVERGREENS—In a large assortment of PYRAMIDAL and GLOBE ARBORVITAE, PFITZER JUNIPER and YEW in grades at attractive prices. SOME LARGE SPECIMEN EVERGREENS. SHRUBBERY and SHADE TREES.

Mail want list for prices.

THE WESTMINSTER NURSERIES
Westminster, Md.

KOSTER NURSERY

Division of Seabrook Farms

Wholesale Nurserymen

BRIDGETON, N. J.

Write for wholesale price list of lining-out and specimen stock in better evergreens and shrubs.

as soon as each spurt of flowering is spent, it will do exactly as the books say it will do. And that takes more than the periodical shearing mentioned. In addition, the clumps should be divided every other year and re-set in fresh soil.

Such a program will give one vigorous young plants, always lovely in their coat of misty gray, and sprays of lavender flowers most of the time from May till frost, provided, of course, one has the true plant. Unfortunately there is an interloper, or perhaps more than one in our midst; so one has to be choosy.

Sphaeralcea Subrhomboidea.

Unless one reads between the lines of *sphaeralcea* literature or lets his curiosity carry him beyond the statements that the species are confined to the warmer regions of South Africa and the Americas, he is likely to think that none is suited to outdoor culture in the northern states. Such is not the case, however, as you can prove to your own satisfaction by getting the intriguing *S. acerifolia* and its near relative (found at a few stations in Illinois and West Virginia) whose name now escapes my memory. And then there is a most pleasing member of the genus, *S. subrhomboidea*, from the west or southwest which would further prove the point.

If I were to make a choice of the *sphaeralceas* that have been in this garden, it would unhesitatingly fall on the last. It came to me years ago from the late Judge Ben Johnson, a collector of Utah and Arizona plants. My notes fail, however, to show where it was collected; so I am merely guessing when I call it a Utah plant. Its ability to get along on less moisture than most *sphaeralceas* need confirms my supposition that it came from a rather dry country, which could mean either Utah or Arizona. In any case, it is a beautiful showy plant, making an attractive bush of two feet in height, more or less, depending upon fertility and moisture, and bearing an abundance of conspicuous reddish-orange mal-lows in twiggy panicles. It is propagated easily from seeds and is quite hardy here in northern Michigan.

Polygala Alba.

Polygala is a vast assemblage (more than 500 species are mentioned in the literature) of contradictions and paradoxes, beauty and plainness, hardiness and tenderness, ease of culture and finickiness existing close together. Gardeners who have tried our eastern and northern *P. paucifolia*, especially in collected plants, and

[Continued on page 47]

SHRUBS

DORMANT STOCK IN STORAGE

Stock listed is in storage and available for immediate shipment. We suggest you wire or telephone your orders since stock offered is subject to prior sale.

	Per 10	Per 100		Per 10	Per 100
BUDDLEIA DUBONNET			SNOWBERRY MOLLIS		
Medium	\$2.50	\$22.00	2 to 3 feet	\$2.50	\$22.00
No. 2	1.80	15.00	18 to 24 inches	1.90	16.00
BUDDLEIA FLORALART			SNOWBERRY		
Medium	2.50	22.00	RACEMOSUS		
CALLICARPA PURPUREA			2 to 3 feet	2.50	22.00
2 to 3 feet	2.90	25.00	18 to 24 inches	1.90	16.00
18 to 24 inches	2.10	18.00	12 to 18 inches	1.50	12.00
CORNUS SANGUINEA			SNOWBERRY VULGARIS		
4 to 5 feet	4.50	40.00	2 to 3 feet	2.50	22.00
3 to 4 feet	4.00	35.00	18 to 24 inches	1.90	16.00
CORNUS STOLONIFERA			12 to 18 inches	1.50	12.00
3 to 4 feet	4.00	35.00	SPIRAEA ANTHONY		
2 to 3 feet	2.90	25.00	WATERER		
COTONEASTER ACUTI-FOLIA			2 to 2 1/2 feet	4.50	40.00
4 to 5 feet	5.00	45.00	SPIRAEA PRUNIFOLIA		
3 to 4 feet	4.00	35.00	4 to 5 feet	5.00	45.00
CRAPE MYRTLE			3 to 4 feet	4.00	35.00
pink or red			SPIRAEA THUNBERGI		
12 to 18 inches	1.80	15.00	4 to 5 feet	5.00	45.00
CYDONIA JAPONICA			3 to 4 feet	4.00	35.00
3 to 3 1/2 feet	3.80	33.00	TAMARIX AFRICANA		
DEUTZIA PRIDE OF ROCHESTER			2 to 3 feet	2.90	25.00
3 to 4 feet	4.00	35.00	18 to 24 inches	2.40	20.00
2 to 3 feet	2.90	25.00	6 to 12 inches	1.50	12.00
HYPERICUM AUREUM			VIBURNUM DENTATUM		
18 to 24 inches	3.00	25.00	4 to 5 feet	5.00	45.00
12 to 18 inches	2.10	18.00	3 to 4 feet	4.00	35.00
SNOWBERRY CHENAULTI			VITEX MACROPHYLLA		
2 to 3 feet	2.50	22.00	18 to 24 inches	3.20	28.00
18 to 24 inches	1.90	16.00	WILLOW PURPUREA NANA		
12 to 18 inches	1.50	12.00	2 to 3 feet	3.50	30.00
			18 to 24 inches	2.40	20.00

WILLIS NURSERY CO.
OTTAWA, KANSAS

TRANSPLANTED SHRUBS

Out of beds, light grade.

All are in storage.

	Each
2000 <i>Cotoneaster divaricata</i> (red berries), 12 to 18 ins.	\$ 0.15
1000 <i>Cotoneaster divaricata</i> (red berries), 18 to 24 ins. ....	.20
1000 <i>Cotoneaster foveolata</i> , (red & orange fall color, black berries) 18 to 24 ins. ....	.15

I. E. ILGENFRITZ' SONS CO.

Monroe, Mich.

RHODODENDRONS.

liners and matured plants.

WHITE-FLOWERING DOGWOOD.

3 to 8-ft. trees.

AMERICAN and OLD ENGLISH

BOXWOOD, in all sizes.

VIRGINIA TREE FARM

Woodlawn, Carroll Co., Va.

GROUND COVER PLANTS

	Per 100	Per 1000
<i>Pachysandra terminalis</i>		
Assorted field-grown ..	6.00	\$ 50.00
<i>Vinca Minor</i>		
2 1/4-in. pot-grown ..	10.00	85.00
<i>Lonicera japonica halliana</i>		
1-year field-grown ..	8.00	60.00
2-year field-grown ..	10.00	90.00
3-year field-grown ..	12.00	100.00
2 1/4-in. pot-grown ..	10.00	90.00

HUGH B. BARCLAY
Narberth, Pa.

AMERICAN ASSOCIATION OF NURSEYMEN

RICHARD P. WHITE.
EXECUTIVE SECRETARY



636 SOUTHERN BLDG.,
WASHINGTON, D. C.

AMEND QUARANTINE ACT.

Senator Elmer Thomas, of Oklahoma, March 27 introduced a bill to amend the plant quarantine act of 1912. The bill, S-1990, was read twice and referred to the committee on agriculture and forestry, of which Senator Thomas is chairman. The bill reads as follows:

"Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the plant quarantine act approved August 20, 1912, as amended, be amended by adding thereto a new section, as follows:

"Section—In order to protect American agriculture, horticulture and forestry from injurious insect pests and plant diseases new to or not widely prevalent or distributed within and throughout the United States, the Secretary of Agriculture is authorized to limit entry of nursery stock from foreign countries to that needed for propagation purposes, under such rules and regulations as he may deem necessary, including the requirement, if necessary, that such nursery stock be grown under postentry quarantine by or under the supervision of the United States Department of Agriculture for the purpose of determining whether imported nursery stock may be infested or infected with plant pests not discernible by port-of-entry inspection and provided that if imported nursery stock is found to be infested or infected with such plant pests, he is authorized to prescribe remedial measures as he may deem necessary to prevent the spread thereof."

By the amendment the Secretary of Agriculture will be authorized to do two things: (1) Limit entry of nursery stock from foreign countries to that needed for propagation purposes, and (2) require that such stock as may be imported, be grown under postentry quarantine until such time as it may be determined that the stock is free from pests not discernible by a port-of-entry inspection. This is all the bill proposes. It merely gives the Secretary of Agriculture authority which he thought he had up to 1940 under the present law. The solicitor of the Department of Agriculture rendered an opinion in 1940 that the secretary had no such authority. As

a result of this opinion, the regulations for importing nursery stock under permit, placing limits on the number of plants of various items that could be imported, to those required for propagation purposes, were revoked in 1943.

This bill, if enacted into law, will not prevent the importation of new varieties of plants into this country from any foreign land. The interests of the amateur and the introducer of new and desirable varieties of economic and ornamental plants are thus protected.

Furthermore, the bill, if enacted into law, will not apply to all plants and plant parts capable of propagation. The term "nursery stock" is defined in the law in section 6 as follows: "That for the purpose of this act, the term 'nursery stock' shall include all field-grown florists' stock, trees, shrubs, vines, cuttings, grafts, scions, buds, fruit pits, and other seeds of fruit and ornamental trees or

shrubs, and other plants and plant products for propagation, except field, vegetable and flower seeds, bedding plants and other herbaceous plants, bulbs and roots." This definition of the term will likewise apply to the new section.

The National Plant Board, representing the forty-eight state regulatory officials, proposed this new section of the law, at a meeting at Washington, D. C., February 20. The Association of Commissioners, Secretaries and Directors of Agriculture, representing the forty-eight state departments of agriculture, meeting at Washington the following week, supported the action of the National Plant Board on February 27.

The A. A. N. board of governors, meeting at Chicago, January 17, 1946, prior to the above meetings, supported the action of the executive committee of the A. A. N. on this matter. At that time, the executive committee or the board of governors had no specific bill to support, but the reaction of the board to the seriousness of the situation was evident by a unanimous approval of the executive committee's position which was expressed in the minutes of their meeting as follows: "Moved, that the executive committee of the A. A. N. authorize the executive secretary to take all possible means to

STRAWBERRY PLANTS

MICHIGAN-GROWN

Several million of the following varieties:

	Per 100	Per 1000
Premier	\$1.50	\$10.00
Robinson	1.50	10.00
Dunlap	1.30	8.00
Gem (Ever.)	2.00	15.00
Minn. 1166 (Ever.)	2.50	20.00

300 of one variety at 1000 rate.

STOCK WAITING FOR YOUR ORDER

HORSE-RADISH

	Per 100	Per 1000
1500 Whole Root Crowns	\$4.50	\$40.00
14,000 4 to 5-in. cuttings	1.25	10.00

VICTORIA RHUBARB

Whole Roots

	Per 100	Per 1000
5000 1/4 to 1-in. cal.	\$4.50	\$40.00
20,000 1/4 to 3/4-in. cal.	3.75	35.00
19,000 3/4 to 1 1/2-in. cal.	2.75	25.00

BLACKBERRIES

	Per 100	Per 1000
12,000 Eldorado, 1-1 R. C.	\$3.50	\$30.00
20,000 Eldorado, 1-2 R. C.	2.50	20.00

BLACK RASPBERRIES

	Per 100	Per 1000
20,000 Cumberland, No. 1 Tips	\$4.00	\$35.00
2000 Cumberland Transplants	8.50	75.00

Packing at cost. No charge on packing Strawberry Plants and Rhubarb. Prices F.O.B. Bridgman.

KRIEGER'S WHOLESALE NURSERY
Bridgman, Mich.

have reestablished at the earliest possible date, (1) quantity limits on imported nursery stock items allowed entry under special permit under quarantine 37, and (2) regulations governing the use to which such imported stock may be put. If this requires amendment to the plant quarantine act of 1912, then the executive secretary is authorized to initiate such amendments or to support such amendments as may be initiated by others."

Since that time and prior to the introduction of S-1990, several organizations have taken official action, supporting the position as now expressed in S-1990. These include the Society of American Florists, the National Grange and the New Jersey Farm Bureau. The following state nurserymen's associations have either passed resolutions or indicated by letter their support of the principle of reestablishing by law the authority of the Secretary of Agriculture to limit the quantities of nursery stock imported to that required for propagation purposes: Michigan Association of Nurserymen, New Jersey Association of Nurserymen, Virginia Nurserymen's Association, Kentucky Nurserymen's Association, New York State Nurserymen's Association, Tennessee State Nurserymen's Association, Pennsylvania Nurserymen's Association, East Texas Rose Growers' Association.

It is expected that hearings will be held on this bill as soon as possible. The purpose of the legislation as expressed in the bill is to protect American agriculture, horticulture and forestry from any more such invasions as we have experienced in the past, that have already cost this country millions of dollars in direct appropriations for attempted eradication and control. Such pests of foreign origin have cost the American farmer and nurseryman additional millions out of their own pockets, for spray machinery, chemicals and labor, to say nothing about the losses due to embargo quarantines in this country, which are always immediately imposed on the theory that to prevent spread of the new pest all traffic in nursery stock particularly must be stopped. Witness in support of these statements the losses occasioned by the Japanese beetle, the white-pine blister rust, the European corn borer, the Oriental fruit moth and many others.

Your senators would like to have your views on S-1990. The facts of the situation are above. The members of the Senate committee on agriculture and forestry, which will handle

[Concluded on page 50.]

SPECIAL SHRUB OFFER

A selected list of desirable shrubs which we can offer in quantity at attractive prices.

F.O.B. PRINCETON NURSERIES

	Each 25 and up		Each 25 and up
* <i>Acanthopanax pent.</i> (Five-leaved Aralia) 1 1/2 to 2 ft.	\$0.20	* <i>Forsythia suspensa</i> (Weeping Forsythia) 3 to 4 ft.	\$0.35
2 to 3 ft. ....	.30	4 to 5 ft. ....	.45
3 to 4 ft. ....	.40	<i>Forsythia fortunei</i> (Fortune Forsythia), 5 to 6 ft. ....	.50
* <i>Amorpha fruticosa</i> (Indigo Bush), 3 to 4 ft. ....	.30	* <i>Hamamelis virginiana</i> (Witch Hazel) 3 to 4 ft. ....	.30
<i>Cornus alba sibirica</i> (Coral Dogwood) 2 to 3 ft. ....	.25	4 to 5 ft. ....	.35
3 to 4 ft. ....	.35	* <i>Lonicera fragrantissima</i> (Winter Honeysuckle), 3 to 4 ft. ....	.35
<i>Cornus amomum</i> (Silky Dogwood) 2 to 3 ft. ....	.20	4 to 5 ft. ....	.45
3 to 4 ft. ....	.30	* <i>Lonicera podocarpa</i> (Late Honeysuckle), 3 to 4 ft. ....	.35
* <i>Cornus paniculata</i> (Gray Dogwood) 1 1/2 to 2 ft. ....	.20	4 to 5 ft. ....	.45
2 to 3 ft. ....	.25	* <i>Lonicera morrowi</i> <i>xanthocarpa</i> (Yellow-fruited) 4 to 5 ft. ....	.45
<i>Cornus sanguinea</i> (Bloodtwig Dogwood) 2 to 3 ft. ....	.25	5 to 6 ft. ....	.55
3 to 4 ft. ....	.35	* <i>Rhamnus frangula</i> (Glossy Buck- thorn) 2 to 3 ft. ....	.25
* <i>Cornus stol. lutea</i> (Goldentwig Dogwood) 2 to 3 ft. ....	.25	3 to 4 ft. ....	.35
3 to 4 ft. ....	.35	<i>Spiraea salicifolia</i> (Willow-leaved Spiraea), 2 to 3 ft. ....	.25
<i>Deutzia candidissima</i> (Snowflake Deutzia), 3 to 4 ft. ....	.35	<i>Stephanandra incisa</i> (Cut-leaved Steph.) 3 to 4 ft. ....	.35
* <i>Elaeagnus longipes</i> (Cherry Elaeagnus) 1 1/2 to 2 ft. ....	.30	4 to 5 ft. ....	.45
2 to 3 ft. ....	.40	<i>Syringa josikaea</i> (Hungarian Lilac) 2 to 3 ft. ....	.30
3 to 4 ft. ....	.60	3 to 4 ft. ....	.40
<i>Forsythia intermedia</i> (Border Forsythia) 4 to 5 ft. ....	.40	* <i>Viburnum lentago</i> (Sannyberry) 2 to 3 ft. ....	.30
5 to 6 ft. ....	.50	3 to 4 ft. ....	.40
<i>Forsythia spectabilis</i> (Showy Border Forsythia), 5 to 6 ft. ....	.50	4 to 5 ft. ....	.50

*Available for immediate shipment. We dig quantity lots with our mechanical shrub diggers, so that we will have during the season a good assortment to fill your orders.

Write for our new SPRING 1946 CATALOG if you have not already received a copy.

WM. FLEMER'S SONS, INC.

Princeton Nurseries

Princeton, N. J.

Evergreens Barberry Privet

Write for wholesale price list.

GARDNER'S NURSERIES

Rocky Hill, Conn.

ORNAMENTAL VINES

Field-grown

	Per 100
<i>Ampelopsis Quinquefolia</i> , No. 4 \$	45.00
<i>Celastrus Scandens</i> , No. 4	20.00
<i>Polygonum Auberti</i> , No. 1	30.00
Hall's Honeysuckle, No. 4	42.00
Scarlet T. Honeysuckle, No. 1	20.00
25 at 100 rate; F.O.B. Fairport.	

JAMES I. GEORGE & SON
Growers
Fairport, N. Y.

Ornamental Trees, Shrubs and Evergreens

Write For Our Wholesale Trade List

W.-T. Smith Corporation
Telephone 2689 GENEVA, N. Y.

GILLETT'S

Nursery-grown

Rhododendrons

Azaleas, Kalmias,

Pieris and Hemlocks

Gillett Fern & Flower Farm

Incorporated

Est. 1878 Southwick, Mass.

WE OFFER

a fine assortment of 2-year shrubs twice transplanted; also fruit trees. Write for wholesale circular.

WANTED

200 Gold Flame Honeysuckle, 2-year, No. 1, or 2-year Medium. Will be pleased to receive your surplus list.



**MALONEY BROS.
NURSERY CO., INC.**
Danville, New York

HEMLOCKS

KALMIA, RHODODENDRON, AZALEA

CURTIS NURSERIES

CALLICOON NEW YORK

Building Restricted

Restrictions on all types of construction except veterans' housing was reestablished by a government regulation issued by the Civilian Production Administration March 26. This will not only defer higher-cost residential building, but may also interfere with nurserymen's plans to build or remodel office and storage buildings.

Known as veterans' housing program order No. 1, the regulation forbids the beginning of construction and repair work on buildings and certain other structures without specific authorization. Certain small jobs are exempt, as noted below. The restrictions of the order apply regardless of whether the materials needed are already on hand or could be obtained without priorities assistance.

The order does not apply to work begun before March 26, 1946, which was being carried on at that date and which is carried on normally after that date. It is explained, however, that this rule applies only to the particular building or other structure begun before March 26; it does not apply to any other building or structure which had not actually been begun by that date, even though the two are closely related.

As to kinds of work, the order states that restrictions "apply to constructing, repairing, making additions or alterations (including alterations incidental to installing any kind of equipment), improving or converting structures, or installing or relocating fixtures or mechanical equipment in structures."

A fixture is defined as any article attached to a building or structure and used as a part of the building or structure. Mechanical equipment is defined as any equipment used to operate a building or other structure.

The order specifically prohibits any person from beginning to construct, repair, make additions or alterations to, to improve, to convert from one purpose to another or to install or relocate fixtures or mechanical equipment in any structure, public or private, except on exempt jobs or when specifically authorized. It makes no difference whether a person is doing his own construction work or working through a contractor or subcontractor, etc.

The list of cost limitations, under which small jobs are exempt, is published below. The cost means the cost of the entire construction job, as estimated at the time construction begins, including paid labor engaged

in the construction work, contractors' fees and cost of new fixtures, mechanical equipment and materials incorporated in the structure. The cost does not include the value of previously used fixtures, mechanical equipment and materials, the value of unpaid labor, the cost of machinery and equipment other than mechanical equipment nor the cost of labor engaged in assembling and installing the machinery and equipment.

Maintenance and repair work in structures in class VI are exempt from the order. No structure, however, can be improved by replacing material still usable with material of a better kind, quality or design.

Persons who wish to begin work prohibited by the order may apply for authorization. An application for work on a farm, except farm dwellings, should be made on form CPA 4423 and filed with the local county agricultural conservation committee. In the case of work on any other

kind of structure besides housing accommodations and farm buildings, applications should be filed on form CPA 4423 with the appropriate construction field office of the Civilian Production Administration. These field offices have been set up in seventy-one cities throughout the country.

When authorization is received, the person receiving it is permitted to do only what work is specifically authorized. He may not, in connection with a job which has been specifically authorized, do additional work under the exemptions given for small jobs.

Exemptions for Small Jobs.

Construction, repair, alteration or installation jobs which cost no more than the following allowances for the kind of structure involved are exempt from provisions of the new construction order:

I. \$400 for a house or other structure (garage, etc.) on residential property designed for occupancy by five families or less.

II. \$1,000 for a residential build-

THE NORTHWEST NURSERY COMPANY

E. C. Hilborn, President

offers

A few new **Rosy Bloom Crab Apples** from the Dominion Station, at Morden.

also

Raspberries—Write for prices.

LATHAM — CHIEF — RUDDY

(Ruddy developed by Dr. Yeager)

THE NORTHWEST NURSERY CO.

Valley City, North Dakota

FOR IMMEDIATE SHIPMENT

The following varieties and grades of well grown stock are available for immediate shipment:

Ampelopsis tricuspidata (veitchi) (Boston Ivy)	Per 100	
2-yr. trans., 2 to 3 ft.		\$45.00
2-yr. trans., 3 to 4 ft.		55.00
Clematis paniculata (Sweet Autumn Clematis)	Per 100	Per 1000
2-yr. medium	\$20.00	\$180.00
2-yr. No. 1	25.00	220.00
Ligustrum amurense (Amur River North Privet)	Per 1000	
12 to 18 ins., 2-yr.		\$70.00
18 to 24 ins., 2-yr.		90.00
Ligustrum ibolium (Ibolium Privet)	Per 1000	
18 to 24 ins., 2-yr.		\$70.00

LOVETT S NURSERY, INC.

Little Silver, N. J.

ing designed for occupancy by more than five families.

III. \$1,000 for a building used primarily for one or more commercial or service establishments.

IV. \$1,000 for a farm, excluding farmhouses.

V. \$1,000 for a church, hospital, school, publicly owned building used for public purposes, or building used exclusively for charitable purposes.

VI. \$15,000 for a factory or other industrial structure used for manufacturing or public utilities.

VII. \$200 for a structure covered by the order which does not fall within one of the classes listed above.

PRESENTS HOME SHOW.

M. B. Esterline, of the Eagle Creek Nursery Co., Inc., New Augusta, Ind., is president of the 1946 victory exposition of the Indianapolis home show to be held May 10 to 19 at the Manufacturers' building, Indianapolis. Prospective homeowners will be able to obtain all the latest information on building and will be able to see many of the new products being developed for home improvement. One of the features of the show is the display of model houses, each surrounded by an attractive garden. The Indianapolis home show is sponsored by ten civic and trade organizations, including the nurserymen's association, the architects' association and the garden clubs of Indianapolis.

VALLEY GARDEN OPENS.

Valley Garden, Wilmington, Del., nationally known as an outstanding example of landscape architecture, is reopening to the public to coincide with the first blooms of the Japanese cherry trees at Wilmington. Although the garden presents a natural appearance, twenty-seven years of skilled work under the direction of Robert Wheelwright, landscape architect, were required to transform the old farm site into today's naturalistic setting. The 102 acres of beautifully landscaped parklands were presented to the Wilmington park board in 1943 by Mrs. Robert Wheelwright as a memorial to her mother, Mrs. T. Coleman du Pont.

THE Wahoo Lodge Nursery & Gardens, Sioux Falls, S. D., are selling out their stock and are discontinuing business.

PAUL J. SEIP is owner and manager of the new Parkway Landscape Service, 1024 Market street, Parkersburg, W. Va.

PROMPT SHIPMENT

We offer the following stock. It is in storage ready for prompt shipment, subject to prior sale and priced F.O.B. Hamburg, Ia.

APPLES

	Per 10	Per 100	Per 1000
11/16-inch and up.....	\$6.00	\$55.00	\$500.00
9/16 to 11/16-inch.....	5.00	45.00	400.00
7/16 to 9/16-inch.....	4.00	35.00	300.00
5/16 to 7/16-inch.....	2.50	22.50	175.00
2 to 3 feet.....	2.00	15.00	125.00

	2 to 3 ft.	5/16-in.	7/16-in.	9/16-in.	11/16-in.
Baldwin, Red.....	75	100	...	...	...
Beacon.....	200	300	...	...	...
C. E. White.....	...	...	...	...	100
Delicious, Solid Red.....	400	650	700	1000	...
Delicious, Sweet.....	150	100	...	...	...
Delicious, Yellow.....	300	600	500	1000	750
Dr. Matthews.....	...	75	100	75	200
Early Red Bird.....	100	100	...	150	100
Grimes Golden.....	100	150	200	450	250
Haralson.....	100	50	75	100	...
Jonathan, New Red.....	500	1000	750	1500	...
Lodi.....	100	150	...	250	...
Maiden Blush.....	50	100	50	50	...
Stayman, Red.....	75	100	250	175	...
Summer Champion.....	...	...	...	250	500
Tolman Sweet.....	25	25	125	50	...
Turley.....	25	25	100	...	...
Wealthy.....	250	450	50	750	...
Winesap.....	250	600	750	400	...
Yellow Transparent.....	200	200	...	...	...
York Imperial.....	260	200	100	...	...

1000 Four-in-One Apple, \$10.00 per 10, \$90.00 per 100

PEACHES

	Per 10	Per 100	Per 1000
11/16-inch and up.....	\$7.50	\$70.00	\$650.00
9/16 to 11/16-inch.....	7.00	65.00	600.00
7/16 to 9/16-inch.....	6.50	60.00	550.00
5/16 to 7/16-inch.....	3.50	20.00	175.00
18 to 24 inches.....	2.50	17.50	125.00

	18 to 24 ins.	5/16-in.	7/16-in.	9/16-in.	11/16-in.
Champion.....	400	1750	...	300	...
Early Elberta.....	500	1200	...	...	...
Elberta.....	1500	800	...	...	...
Elberta Cling.....	100	150	...	...	...
Golden Jubilee.....	150	200	...	...	...
Hale Haven.....	500	...	...	500	200
J. H. Hale.....	500	400	...	300	100
Polly.....	...	1500	500	...	500
Red Haven.....	1000	1500	...	...	...

STRAWBERRY PLANTS

These were dug when dormant and are now in cold storage; we have found that handled in this way these plants do better than digging them after they have started growth.

	Per 1000	Per 5000
Gem Everbearing.....	\$16.00	\$ 62.50
Evermore (Minn. 1166).....	16.00	62.50
Streamliner.....	50.00	225.00

1500 Canada Red Rhubarb, \$4.00 per 10, \$35.00 per 100
 10,000 Sunrise Raspberries, \$5.00 per 100, \$45.00 per 1000
 2000 Paul's Scarlet Roses, No. 2, \$3.00 per 10, \$25.00 per 100
 1500 Dr. Huey, finest dark red Climbing Rose, No. 1, \$4.00 per 10, \$35.00 per 100.

12 to 18 ins. 18 to 24 ins.
 Spiraea Froebeli, 500, 15c ea.; 400, 20c ea.
 Spiraea Billiardii, 200, 12c ea.; 200, 15c ea.
 Spiraea Arguta, 150, 12c ea.
 500 Silver Lace Vines, 27c ea.
 1000 Wistaria, Pink, 25c ea.
 1000 Wistaria, Purple, 20c ea.

These Wistarias are grafted or grown from blooming wood.

INTER-STATE NURSERIES

Hamburg, Iowa

Elm Diseases

ELM PHLOEM NECROSIS IN ARKANSAS AND OKLAHOMA.

Elm phloem necrosis, heretofore unknown to occur in Arkansas and Oklahoma, was found in localized areas in each of these states during June, and later in the summer of 1945, reports Howard W. Larsh, of the University of Oklahoma, in a recent issue of the Plant Disease Reporter.

Trees in all stages of decline were found, from early wilting of the foliage to complete defoliation. Most of the trees observed in June, however, were in the early stage of wilting, with little defoliation. In each instance when American elms showed any degree of yellowing and defoliation, the bases of the trunks and the buttress roots were examined. In nearly every case a yellowish to butterscotch discoloration of the inner phloem was present and a faint but distinct wintergreen odor could be detected in the affected tissue. To ascertain definitely the wintergreen odor, the affected tissue was carefully removed from the remainder of the bark, placed in a small jar and sealed for a few minutes. This procedure usually resulted in a strong odor of wintergreen. In addition to the above characteristic symptoms of the disease, flecking and brown streaking of the phloem area were frequently observed. In the diseased trees the inner bark could be removed from the remainder of the bark with relative ease.

No attempt was made to ascertain the distribution of the disease within Arkansas and Oklahoma; however, surveys were made through each of these states where the American elm grows in large numbers to determine whether phloem necrosis occurred in these areas.

During the early growing season of 1945, weather conditions in these areas were conducive to foliage diseases. Rather early in the season, anthracnose and leaf blight caused yellowing and slight defoliation, which were complication factors in early determination of phloem necrosis. Severe infestation by terrapin scale and lace bug interfered with determination later in the season.

In Arkansas, a survey was made from Fayetteville north to Gateway, then east on U. S. highway 62 to Piggott, and from Piggott south to Jonesboro on state highway 1. Infected trees were observed between Corning and Piggott on U. S. high-

way 62. The stands of American elm in this area were thickest on the banks of small creeks and in fields adjoining the highway. In the city of Jonesboro, where native American elms had been planted, several trees were affected by phloem necrosis. In a localized area of this city, some trees had been removed in past years. According to the owner of the property, the removed trees showed symptoms characterized by the recently infected trees till standing. Therefore, there is some justification in assuming that the disease has been present in Jonesboro, Ark., for several years.

Infected trees have been examined in northeastern Oklahoma near the cities of Miami, Wyandotte and Bartlesville. The most concentrated area of infection centered within the city of Bartlesville. Several trees in all stages of the disease were observed early in June, 1945. Characteristic

foliage symptoms, as well as other symptoms ascribed to phloem necrosis, were present.

Since these early surveys, many reports from various areas of the state of Oklahoma have been received. Specimens have been sent to the state laboratory for study. Most of these, however, have been aerial portions of American elms infected by foliage disease-producing organisms or infested with lace bugs. Several reports of possible infected trees in Tulsa and Oklahoma City have been received from Clyde A. Bower, of the Oklahoma state department of agriculture. None of these trees have yet been examined by the author.

Dr. T. W. Bretz, of the United States Department of Agriculture, recently had an occasion to check the trees in northeastern Oklahoma. In a letter to the author on September 4, 1945, Dr. Bretz wrote: "In addition to finding the disease at Bartlesville, I also found it at Miami, Oklahoma."

There seems to be little doubt,

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Tips	5.50	45.00
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No. 1	\$20.00	\$175.00
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Rooted Layers	5.00	35.00

SWEET CHERRY

August Supreme	Per 100	Per 1000
9/16-in. cal., 4 ft. up.	\$100.00	
7/16-in. cal., 3 to 4 ft.	75.00	

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therefore, on the basis of the aerial symptoms combined with those affecting the inner bark at the tree base, that phloem necrosis is responsible for the death of many American elm trees in Arkansas and Oklahoma.

DUTCH ELM DISEASE IN CONNECTICUT.

Sixteen new towns were found to have trees infected with the Dutch elm disease in 1945, according to a report by M. P. Zappe, deputy entomologist at the Connecticut agricultural experiment station. The towns, most of them east of the Connecticut river, are Westbrook, Old Saybrook, Essex, Waterford, New London, Montville, Norwich, Lisbon, Colchester, Lebanon, Marlborough, Hebron, Windham, Chaplin, Mansfield and Somers.

Mr. Zappe points out in his report that the spread of the Dutch elm disease is alarming, and prompt control steps must be taken if the future of Connecticut elms is not to be imperiled.

The disease was first found in the state at Greenwich in 1933. Since then, the disease has spread to the east and north until, by 1945, it was found in every county. In the areas where it has been present for several years, it is causing considerable loss of elms. This is particularly true in Fairfield and New Haven counties.

The rapidity with which the disease develops is illustrated by conditions at East Hartford, Glastonbury and Portland, where eighteen, twenty-eight and forty-three diseased trees, respectively, were found in 1945. The first diseased elms were found at East Hartford and Glastonbury in 1944 and at Portland in 1942.

Only a few towns on the eastern boundary of the state are still uninfected, and if the present rate of spread continues, Mr. Zappe believes the disease will soon reach these towns and cross to Rhode Island.

The principal vector of the Dutch elm disease is the elm bark beetle, which carries the disease from infected elms to healthy trees. The only means of control now known is to cut down and burn diseased trees which harbor the bark beetles. In the case of large trees, complete peeling of the bark and burning of the material are satisfactory. Elm trees dying of other causes than Dutch elm disease are likely spots for bark beetle breeding. Therefore, these also should be cut down and burned.

FRUIT TREES AND FRUIT PLANTS

APPLE	2 to 3 ft.	1-year Whips	4 to 6 ft.	2-year Branched	
	25c ea.	3 to 4 ft.	45c ea.	3 to 5 ft.	4 to 6 ft.
Bonum	200	300	150	200	100
Delicious	300	500	500	...	...
Dbl. Red Delicious	500	1000	3000	...	...
Dbl. Red Duchess	...	...	...	200	300
Early Harvest	50	50	...	300	300
Early Red Bird	100	...	...	150	100
Fall Pippin	...	...	...	100	50
Hyslop Crab	...	...	...	150	50
Jonathan	...	...	...	100	100
Lady	...	...	...	100	100
Liveland Raspberry	...	...	...	150	75
Lodi	500	300	...	100	...
Lowry	500	800	1500	...	...
Macoun	...	...	...	85	90
Maiden Blush	...	...	...	200	300
M. B. Twig	...	100	400	...	...
Newtown Pippin	...	100	...	200	100
N. W. Greening	200	...	...	100	150
Paragon Winesap	...	...	...	75	100
Red June	...	...	...	...	50
Smokehouse	...	50	...	200	...
Summer Rambo	50	100	50	150	100
Sweet Paradise	...	...	...	100	300
Winesap	300	800	600	...	...
Winter Banana	...	...	...	300	200
Yellow Transparent	400	500	...	200	400
PEACH	18 to 24 ins.	2 to 3 ft.	5/16-in.	7/16-in.	9/16-in.
	20c ea.	25c ea.	30c ea.	45c ea.	60c ea.
Afterglow	50	200	200	100	50
Belle of Ga.	...	500	300	600	...
Brackett	500	1000	...	...	...
Carman	...	...	50	300	100
Champion	...	...	300	200	100
Elberta	10,000	8000	6000	1000	2000
Early Elberta	400	...	...	...	...
Fireglow	75	300	300	100	50
Gage Elberta	300	200	100	...	...
Golden East	50	200	250	120	100
Golden Jubilee	300	600	100	100	50
J. H. Hale	1000	1000	800	...	...
Heath	20	50	50	300	200
Hilcy	300	400	200	100	50
Indian	600	100	...	...	...
Slappy	50	50	50	50	...
South Haven	150	300	100	350	50
Stump	50	100	50	100	...
Trilogem	50	100	150	100	...
Vedette	100	100	100	300	50
PLUM			4 to 6 ft.	8 to 4 ft.	2 to 3 ft.
			85c ea.	70c ea.	50c ea.
Abundance	...	...	50	50	100
Burbank	...	...	50	75	200
Damson	...	...	...	300	500
Red June	...	...	...	100	100
Wickson	...	...	100	200	50

MISCELLANEOUS FRUITS

APRICOT, 100, 3 to 4 ft., 85c; 250, 2 to 3 ft., 60c.
 NECTARINES, 300, 4 to 6 ft., 85c; 200, 3 to 4 ft., 65c; 300, 2 to 3 ft., 50c.
 GRAPE, 2-yr., assorted varieties, \$2.50 per 10.
 THORNLESS BOYSENBERRY, \$7.50 per 100; \$65.00 per 1000.
 CUMBERLAND RASPBERRY, \$4.00 per 100; \$37.50 per 1000.
 LATHAM RASPBERRY, \$6.50 per 100; \$60.00 per 1000.
 SUNRISE RASPBERRY, \$7.50 per 100; \$70.00 per 1000.
 CHINESE CHESTNUT, 18 to 24 ins., \$8.50 per 10.
 ENGLISH WALNUT, 12 to 15 ins., \$5.00 per 10.

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Bar Harbor Juniper	...	17.50	20.00	25.00
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Sabina Horizontalis Glauca Juniper	...	25.00	30.00	...
Pfitzer Juniper	17.50	25.00	30.00	...
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American Arborvitae	...	\$17.50	\$20.00	\$25.00
Douglas Golden Arborvitae	...	17.50	20.00	25.00

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STRAWBERRIES		Per 100	Per 250	Per 500	Per 1000
Minnesota 1166 Evb.	...	\$3.00	\$6.50	\$12.00	\$18.00
Crimson Gem Evb.	...	2.00	4.50	8.00	16.00
RASPBERRIES, 1-Yr. Plants					
Sunrise or Latham Red	...	\$8.00	\$18.00	\$35.00	\$70.00
Cumberland Black	...	4.00	9.50	18.00	32.00

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Bulletins Received

HONEYSUCKLE LEAF BLIGHT.

The causal agent of honeysuckle leaf blight is described as a new species of the genus *herpobasidium*, *H. deformans*, in a study of "The Parasitism of *Glomerularia Lonicerae* (Pk.) D. and H. in *Lonicera Species*," by Charles J. Gould, Jr. This paper, which appeared in the Iowa State College Journal of Science, for July, 1945, is now reprinted in bulletin form.

Leaf blight of honeysuckle, caused by the parasite *H. deformans*, was found to appear in spring on early leaves, and secondary infections usually followed during the remainder of the year. As a result of Mr. Gould's studies, the host range was found to extend to include thirty-three species and varieties of *Lonicera* and a member of a related genus, *Symphoricarpos albus*. There was considerable variation in susceptibility of different varieties. *Lonicera japonica halliana* appeared immune. The disease ranged from the north central and northeastern part of the United States through adjacent areas of Canada and Newfoundland.

Infection of host plants followed exposure to basidiospores but never to conidia. Conditions favoring exposure were 15 to 18 degrees centigrade, a relative humidity near 100 per cent, sustained periods of high humidity for two or more days and the use of young leaves and of lower leaf surfaces.

RAMIE EXPERIMENTS.

Since agriculture is a highly seasonal occupation in some areas of Florida, particularly the Everglades, those plants which can be grown in the off season are being developed. One such plant is ramie, *Boehmeria nivea*, which grows well and can be harvested during the summer months when other crops need little attention. Accordingly, rather detailed experiments concerning the culture, fertilizer requirements and fiber yields of ramie have been conducted for the past fifteen years by the Florida agricultural experiment station in anticipation that ramie may become a crop of commercial importance, reported in bulletin 412, issued recently.

Experiments have determined fertilizer requirements in relation to fiber yields and have yielded data on the rate of growth in relation to the time of cutting. Information

is recorded on the suitable type of ramie, methods of planting and applying fertilizers, the rate of increase of rootstock planting material and the water control necessary for successful culture on the Everglades' peat and muck soils.

CREDIT SOURCES.

How small businesses may obtain credit and capital for sound business ventures is explained in a bulletin on "Credit Sources for Small Business" issued recently by the U. S. Department of Commerce.

The private commercial bank is still the main source of business credit, the bulletin says, and small businesses have even more reason to turn to their banker for credit help than large companies, which have increasingly relied on internal financing and

on the issuing of securities to meet their capital and credit needs.

The bulletin discusses in detail the types of credit extended by such diverse institutions as banks, industrial banking companies, small loan companies, factors, sales finance companies, miscellaneous finance companies, insurance companies, equipment manufacturers, wholesalers and similar suppliers, individual investors, investment bankers, corporations seeking affiliates, branches or outlets, the Reconstruction Finance Corporation, Federal Reserve Banks, Smaller War Plants Corporation, Federal Housing Administration and community industrial development groups.

Many banks are now setting up special small business departments,

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6 to 8 ft., 3/4 to 1-in. cal., whips, per 100,
\$75.00; 8 to 10 ft., 3/4 to 1-in. cal., well branched,
per 10, \$10.00; per 100, \$85.00; 8 to 10 ft., 1 to
1 1/4-in. cal., well branched, per 10, \$12.50; per
100, \$100.00; 1 1/4 to 1 1/2-in. cal. (in the ground),
ea., \$1.50, plus 25¢ dug bare root; 1 1/2 to 1 3/4-in.
cal. (in the ground), ea., \$2.00, plus 35¢ dug
bare root.

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7 to 12 ft., 1/2 to 1-in. cal., \$50.00 per 100
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according to the bulletin, which states that in the choice of a bank the small businessman should "choose a banker who possesses character and leadership, one who is willing to assume a risk providing there is a reasonable chance of repayment; a progressive banker, one who is alert to current industrial trends, willing to make loans for new products and more efficient processes."

"Such a banker," the bulletin says, "knows that in a world of rapid change, risk is a matter of careful analysis, not merely of traditional soundness."

The community banker, who more often than not is a small businessman himself, may be more receptive to the needs of the small businessman than the larger city bank, the bulletin says, but sometimes the larger banks quote more favorable rates and the only answer is to compare.

Once the small businessman has chosen a banker he should consult him frequently, visiting him at his office and inviting him to return the visit, the bulletin advises, and adds:

"Show him around. Invite him to look over your books, freely explain your plans to him, especially if they involve expenditures out of the ordinary. Do not try to conceal difficulties from him. It is part of the banker's code not to betray confidences. Mutual frankness is the first basis of good banking relations."

Businessmen who can qualify should be able to turn to their bank for one of the following types of loans, according to the bulletin: Character loans, term loans, installment loans, loans on accounts receivable, loans secured by warehouse and field warehouse stocks and equipment loans.

The difficulty small businesses often encounter in securing adequate credit is also discussed, and the bulletin notes that "small concerns have often had to resort to the unsound practice of using renewable short-term commercial loans for working capital, for long-term seasonal capital or even to take the place of fixed long-term capital."

In general, the bulletin says, the businessman is justified in seeking a loan when he can use it to cut costs or otherwise increase efficiency by more than the cost of obtaining the additional funds, but he should not forget that "other things being equal the company that gets the credit it needs at the least expense wins."

The booklet is designed for widespread distribution among small businessmen and may be obtained from the Superintendent of Documents,

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2-year, No. 1	2.10	18.00
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NIAGARA , Yellowish-green		
2-year, No. 1	2.10	18.00
1-year, No. 1	1.70	14.00
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No. 1 suckers	\$7.50	\$70.00
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No. 1 tips	5.50	50.00
No. 2 tips	3.50	30.00
SUNRISE , Red		
No. 1 suckers	7.50	70.00
No. 2 suckers	5.50	50.00
VAN FLEET , Red		
No. 1 tips	6.50	60.00
WASHINGTON , Red		
No. 1 suckers	5.50	50.00

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	Per 10	Per 100
CHERRY		
2-year, No. 1	\$2.40	\$20.00
1-year, No. 1	1.80	15.00
FAY'S PROLIFIC		
2-year, No. 1	2.40	20.00
1-year, No. 1	1.80	15.00
RED LAKE		
1-year, No. 1	2.40	20.00
WILDER		
2-year, No. 1	2.40	20.00
1-year, No. 1	1.80	15.00

BLACKBERRIES

	Per 100	Per 1000
Root Cutting Plants		
ALFRED		
No. 1	\$5.00	\$45.00
EARLY HARVEST		
No. 1	5.00	45.00
No. 2	3.50	30.00

GARDEN ROOTS ASPARAGUS

	Per 100	Per 1000
PARADISE		
1-year	\$1.90	\$16.00
WASHINGTON		
2-year	2.00	18.00
1-year	1.40	12.00

RHUBARB

	Per 100	Per 1000
MACDONALD		
Strong divisions	\$30.00	\$250.00
VICTORIA , Whole roots,		
1/2 to 5/8-in.	3.50	30.00

HORSE-RADISH

	Per 100	Per 1000
ROOT CUTTINGS	\$4.00	\$35.00
CROWNS	7.50	65.00

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Washington 25, D. C., or from the Department of Commerce field offices at 15 cents a copy.

BULLETINS RECEIVED.

"Growing Garden Roses," by E. C. Volz, bulletin P76 of the Iowa agricultural experiment station, Ames, is a 28-page illustrated pamphlet of information for the home gardener in regard to the care of rose plants in the climatic conditions of Iowa, with a list of varieties recommended for planting in that state.

"Destroy the Rust-spreading Barberry," circular 598 of the college of agriculture at the University of Illinois, is a 16-page pamphlet advising farmers on the protection of small grain crops from stem rust by the destruction of the alternate host plant, the common barberry, distinguishing the identifying characteristics of that species and the resistant Japanese barberry, which is harmless. Every nurseryman in the grain-producing states should be familiar with this matter.

"Walnut Production in California," circular 364 of the California agricultural experiment station, Berkeley, treats as fully as its thirty-six pages permit, this important nut crop of the Golden State from rootstocks and propagation to preparation for market.

Nurserymen confronted with the problem of protecting natural drainage ways from gullying will find helpful information about establishing waterways, seeding and maintaining sod in a 20-page pamphlet, "Grass or Gullies," by E. D. Walker and R. C. Hay, just issued as circular 593 by the extension service of the college of agriculture of the University of Illinois, Urbana.

DDT AND BEES.

Inasmuch as many comments have gone the rounds about whether applications of DDT insecticides are fatal to honeybees, the Geigy Co., originator of DDT, has gathered excerpts from a number of sources indicating that while a few bees are killed in the process of dusting or spraying, no evidence indicates that whole colonies are destroyed. The only possibility for wholesale damage, it is asserted, would be the application of the insecticide when fruit trees were in full flower and the bees were at work.

As a matter of fact, it is claimed that DDT may help promote more vigorous growth and bloom in some plants, by destroying injurious insects, with profit to local beekeepers.

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Our season is getting pretty far advanced and we are offering the remainder of our stock at the following attractive prices:

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5000 Elberta, $\frac{7}{8}$ to $\frac{1}{2}$ -in.	\$0.15
2500 Elberta, $\frac{7}{8}$ -in.	.17½
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1000 Belle of Georgia, $\frac{7}{8}$ -in.	.20
500 Belle of Georgia, $\frac{7}{8}$ -in.	.17½
500 Belle of Georgia, $\frac{7}{8}$ -in.	.15
1000 Golden Jubilee, $\frac{7}{8}$ to $\frac{1}{2}$ -in.	.15
500 Golden Jubilee, 18 to 24 ins.	.10
1000 J. H. Hale, 18 to 24 ins.	.10
200 Early Elberta, $\frac{1}{2}$ -in.	.45
800 Mayflower, $\frac{7}{8}$ to $\frac{1}{2}$ -in.	.15
900 Red Bird, $\frac{7}{8}$ to $\frac{1}{2}$ -in.	.20

APPLE

1500 Red and Double Red Delicious, 4 to 5 ft.	.15
1000 Red and Double Red Delicious, 3 to 4 ft.	.10
500 Yellow Delicious, 3 to 4 ft.	.10
1500 Stayman Winesap, 4 to 5 ft.	.15
1000 Stayman Winesap, 3 to 4 ft.	.10
1000 Stayman Winesap, 2 to 3 ft.	.08
2000 Double Red Delicious, 2 to 3 ft.	.08
1550 Red Delicious, 2 to 3 ft.	.08
2000 Red Delicious, 18 to 24 ins.	.05

All orders subject to prior commitment. We suggest you wire your orders in collect if you are interested in any of the above items.

FARMERS WHOLESALE NURSERY

PAUL PATTERSON, OWNER

P. O. Box 65. Phone-44

Smithville, Tenn.

DECIDUOUS TREES

Will sell the following very reasonably, but the buyer must dig and remove them.

- 500 Honey Locusts, 2 to 2½ ins.
 50 Norway Maples, 4 to 8 ins.
 Sycamores
 White Ash
 Pin Oaks

Some Apple and Plums.
 2 to 4 ins.

FAIRVIEW NURSERY

4011 Fairview Ave.
 Downers Grove, Ill.

Ornamental Trees and Shrubs. Perennials in a wide assortment of varieties. Asparagus, Raspberries, Multiflora Japonica Seedlings.

Write for Trade List.

BROWN BROTHERS CO.
 Brighton Sta., Rochester 10, N. Y.

BOSTON IVY

2-year, No. 1 35¢

I. E. ILGENFRITZ' SONS CO.
 Monroe, Mich.

"Propagation of Horticultural Plants"

By G. M. Adriance and
 F. R. Brison,

of Texas A. & M. College

Describes the various methods
 of propagation.

314 pages, illustrated,

\$3.00

AMERICAN NURSERYMAN

343 So. Dearborn St., Chicago 4, Ill.

WANTED

300 Spreading Yews, 15 to 18 ins.
 300 Spreading Yews, 18 to 24 ins.
 100 Spreading Yews, 2 to 2½ ft.
 100 Upright Yews, 18 to 24 ins.
 100 Hicks Yews, 18 to 24 ins.
 Please send catalog and surplus list on other stock.
G. E. HEIDEMANN NURSERY
 Addison, Ill.

AZALEAS

Liners Wanted—Hardy Types

J. L. NALEN

8 Grosbeak Road Yonkers, N. Y.

Rhodos
BOTH NATIVE
AND NURSERY GROWN
KALMIA AZALEAS
Hemlocks and Pieris
La Bars'
STROUDSBURG PA.

We have been swamped with advance bookings to the point that we are already sold out for this Spring in all the smaller popular sizes. Our only offerings now are collected plants, or larger sizes of nursery-grown material.

LA BARS'
RHODODENDRON NURSERY

CLIMBING ROSES
Paul's Scarlet
Climbing American Beauty
Dr. Van Fleet
No. 1—60c ea.
Dorothy Perkins
Excelsior
No. 1—45c ea.

Now available in quantities, but please order EARLY.

Jackson & Perkins Co.
NEWARK, NEW YORK

BOBBINK & ATKINS
Nurserymen and Plantsmen

Visitors always welcome.

Paterson Ave. E. Rutherford, N. J.

ASPARAGUS
Mary Washington
1 and 2-yr. plants.
Let us quote on your needs.

BOUNTIFUL RIDGE NURSERIES
Princess Anne, Md.

Wholesale growers of
SMALL FRUIT PLANTS
Grapes, Currants and Raspberries—
our specialty.
Hydrangea P. G.

FOSTER NURSERY CO., INC.
69 Orchard St. Fredonia, N. Y.

BUXUS SEMP. WELLER
(Weller's Hardy Northern Type)
Only Boxwood proved hardy in Northern
States for Twenty Years.
Ask for our Perennial catalog.

WELLER NURSERIES CO., Inc.
Leading Perennial Growers
Holland, Mich.

COVER ILLUSTRATION.

Pinus Flexilis.

Pinus flexilis, the limber pine, is one of the 5-needle pines that have increased in popularity during recent years. While it will not replace our common eastern white pine, *Pinus strobus*, or some of the exotics, it is a good addition to the list of satisfactory tree evergreens.

Pinus flexilis is native in the territory from Alberta to California, west to Montana and west Texas. It is said to reach a height of fifty to eighty feet in its native habitat, but thirty-five to forty feet appears to be about its maximum size in the midwest. Small trees are quite narrow pyramidal, but with age, plants become broad pyramidal or nearly round-headed. The needles are dark green in color, two and one-half to four inches long, and are borne five in a cluster. While the needles of most of the 5-needle pines are minutely toothed, *Pinus flexilis* is one of the few which have entire needles. This characteristic can be easily checked with a hand lens or by running the thumb and finger down the needle. Another characteristic of the limber pine is the tough, pliable branchlets.

The limber pine is hardy at temperatures of at least 15 to 20 degrees below zero and appears to be adaptable to general soil conditions. While the 5-needle pines as a group are not so adaptable to adverse conditions as are the 2-needle pines, *Pinus flexilis* is somewhat more adaptable to such conditions than most of the other 5-needle pines. Propagation is by seeds, which may be fall sown or stratified over winter and sown the following spring.

Pinus flexilis will make a good tree for specimen or screen planting. It has a relatively slow growth rate; so this species should be more adaptable to small home ground planting than many of the vigorous-growing types.

L. C. C.

[Photograph from New York Botanical Garden.]

DDT AND WHITEWASH.

Fresh whitewash is likely to be sufficiently alkaline to decompose DDT. DDT should therefore not be mixed with whitewash or applied over freshly whitewashed surfaces.

It may be applied over old whitewash which has largely lost its alkalinity. Any decomposition of the DDT under these conditions will be slow and its efficiency can be maintained by applications at shorter intervals, if needed.

Lining-Out Stock

Liners from Field Beds	Per 100	Per 1000
Canadian Hemlock, 4-yr., XX, 6 to 9 ins.	\$18.00	\$170.00
Daphne Mezereum, sdig., 3-yr., X, 5 to 8 ins.	10.00	90.00
Viburnum Opulus Nanum, 3-yr., XX, 6 to 9 ins.	35.00	325.00
Regel Privet, 2-yr., X, 12 to 18 ins.	3.50	30.00
Euonymus americanus, 2-yr., sdig., 4 to 8 ins.	8.00	80.00
Euonymus coloratus, 2-yr., X, 8 to 12 ins.	12.00	120.00
Chinese Elm, sdig., 3 to 6 ins.	3.00	25.00
American Elm, 2-yr., X, 2 to 3 ft.	8.00	75.00
Pachysandra terminalis, 2-yr.	6.00	50.00

Liners, Rooted Cuttings and Seedlings.

Azalea mollis, 1-yr., X.	10.00	90.00
Euonymus fortunei, R.C.	8.00	70.00
Euonymus carrierei, R.C.	9.00	80.00
Euonymus coloratus, R.C.	8.00	70.00

Regarding Liners: 300 plants of a kind at 1000 rate, 50 plants of a kind at 100 rate. Less than 50 plants of a kind add 10 per cent to 100 rate.

Hardy Perennials

Perennials fresh dug, 1-year plants or divisions from 2 and 3-year plants. All grown in outside field beds. 5 to 24 at 10 rate; 25 up at 100 rate.

	Per 10	Per 100
Achillea roseum, pink-purple.	\$1.00	\$ 9.00
Achillea ptarmica, white.	1.00	9.00
Anthemis tinctoria, yellow.	.90	8.00
Catananche caer. alba bicolor.	1.00	9.00
Dianthus knappi, yellow.	1.00	9.00
Dianthus plumarius, red.	.90	8.00
Daisy Mayfield Giant, white.	1.20	11.00
Gallardia Dazzler, orange.	1.20	11.00
Hemerocallis flava, dwf., yellow.	1.50	14.00
Hemerocallis Mrs. Wyman, yellow.	1.50	14.00
Iberis gibraltarica, lavender.	1.20	11.00
Iris, Dwarf Chinese, yellow; white.	1.00	9.00
Liatris pycnostachya, purple.	1.00	9.00
Lychnis chalcidonica, scarlet.	1.20	11.00
Lychnis viscaria splendens, pink.	1.20	11.00
Myosotis palustris, blue; dwarf.	1.00	9.00
Nepeta mussini, blue, prostrate.	1.00	9.00
Phlox subulata atropurpurea, red.	1.00	9.00
Phlox subulata rosea, pink early.	.90	8.00
Phlox subulata Vivid, deep pink.	1.00	9.00
Physostegia virginica, pink.	.80	7.00
Pyrethrum superbum rubrum.	1.20	11.00
Rudbeckia purpurea, lavender.	1.20	11.00
Sedum asiaticum, 10-in., yel.	1.50	14.00
Sedum kamtschaticum, yel.	.90	8.00
Sedum middendorffianum, yel.	.90	8.00
Scabiosa Japonica, blue.	.90	8.00
Sweet William Salmon Queen.	.90	8.00
Thymus citriodorus, lavender.	1.00	9.00

Terms: Cash with order; no C.O.D. April and May delivery. Packing and boxing at cost to us, additional. Jap. beetle certified. Certificate upon request.



Azalea Mollis
1-yr. Transplant

Hybrid
Rhododendron
1-yr. Transplant

PALLACK BROS. NURSERIES, INC.

RFD 1, Harmony, Pa.

(35 miles north of Pittsburgh, Rt. 19.)

LAKE'S SHENANDOAH NURSERIES

Shenandoah, Iowa

*Wholesale growers of
a fine assortment of*

GENERAL NURSERY STOCK

Your inquiries will be appreciated.

SOLD OUT

Thank you, customers, for your generous orders—we will offer a better list in 1947. Lining-out list ready in June.

HOLTON & HUNKEL CO. NURSERIES

P. O. Box 1747, Milwaukee 1, Wis.
Nurseries at Brown Deer.

Northern-grown Stock

Send
for
Price
List.

J. V. BAILEY NURSERIES

St. Paul 6, Minn.

GRAFTS

Juniperus Scopulorum Parki
Something new.

A spreading scopulorum of the pfitzeriana type. All rights released. Not over 100 to a customer.

Price, 75c each.

No other grafts available
this spring.

CHANDLER LANDSCAPE & FLORAL CO.
101 W. 47th St. Kansas City 2, Mo.

PFITZERS

**An outstanding planting
of Finished Trees.**

24 to 30 to 36 ins.
Also smaller sizes.
Beautiful stock B&B

Shipment in moss, if preferred, individually wrapped or bulked.

Also *Tamariscifolia*, various Pines,
Concolor Fir, Colorado Blue Spruce,
Colorado's Silver Cedar, etc.

HIGH VALLEY FARM
Colorado Springs, Colo.

OBITUARY

Martin L. Davey.

Martin L. Davey, Kent, O., died March 31 at the age of 61, following an attack of coronary thrombosis. Mr. Davey, who operated a nationwide tree surgery business, had served two terms as governor of Ohio.

The tree surgery business, which Mr. Davey had taken over as a small organization from his father in 1907, grew into a million dollar business, with branches in seventy cities.

Elected mayor at Kent in 1913, when he was 28 years old, Mr. Davey served six years. He went to Congress for nine years. In 1928 he was the Democratic candidate for governor, but was defeated. However, he was elected to the office in 1934 and again in 1936. He retired from politics after he was defeated for the governorship in 1940 by former Governor Bricker.

William Everett Beaudry.

William Everett Beaudry, 87, president of the former Beaudry Nursery Co., Chicago, Ill., died March 23 at his home at West Los Angeles, Cal. Mr. Beaudry was a former member of the Los Angeles board of education, a director of the chamber of commerce (western division) and a founder of the West Los Angeles Rotary Club. He is survived by a son, William A. Beaudry, of W. A. Beaudry & Associates, Chicago; a daughter, Mrs. Victor James Mense, also of Chicago, two grandchildren and three great-grandchildren.

Lieut. Com. L. S. Stark.

Lieut. Com. Lloyd Stickney Stark, son of Lloyd C. Stark, of the Stark Bros. Nurseries & Orchards Co., Louisiana, Mo., report of whose death appeared in the preceding issue of the American Nurseryman, was killed when a C-47 army airplane crashed in the Sierra Nevada mountains, north of Lake Tahoe, which is on the boundary of California and Nevada. Commander Stark was assistant secretary of the nursery concern.

Commander Stark was security officer at the navy yards and dry docks, Hunter's Point, San Francisco, Cal. Formerly he was assistant security officer at Mare island and was second in command in naval intelligence at Pearl Harbor, when the Japanese struck December 7, 1941.

He leaves his widow, Mrs. Dorcas Stark; one son, Lloyd S., Jr.; one

C. M. Hobbs & Sons, Inc.

BRIDGEPORT INDIANA

Established 1875

WHITE-FLOWERING DOGWOOD

GINKGO

NORWAY MAPLE

SOFT MAPLE

SWEET GUM

THURLOW WILLOW

WELL GROWN EVER- GREENS, in variety.

Boyd

NURSERY COMPANY

McMinnville, Tenn.

ORNAMENTAL SHRUBS SHADE TREES, VINES FOREST TREE SEEDLINGS LINING-OUT STOCK

WE CAN SUPPLY

Agawam, Brighton, Catawba, Concord, Fredonia, Lucile, Moore's Early, Niagara and Worden Grapes in 2-yr., No. 1, and 2-yr., No. 2.
Latham Red Raspberries.
Plum and Prune, northern-grown on Myroholan, 1-yr., 18 to 24 ins., 2 to 3 ft., 3 to 4 ft., 4 to 5 ft.
Bartlett Pear, 1-yr., 7/16-in.
Sweet Cherry, 1-yr., 18 to 24 ins., 2 to 3 ft., 5/16-in., 7/16 and 9/16-in.
Apricots, 5/16-in.
Apple, 1-yr., 7/16 and 9/16-in.

CHAMPION NURSERIES

Perry, Ohio

SMALL FRUIT PLANTS

Still available: Black Raspberry tips, St. Regis Raspberries, Blackberries, Boysenberries, Rhubarb, Asparagus, 1-yr. Niagara Grapes, large quantities of Strawberries in spring and fall varieties. Write for quotations.

Also offering good supply of Adams and fair amount of Rubel and Rancocas Blueberries, 1-yr. rooted cuttings, 35c ea.; \$30.00 per 100; \$250.00 per 1000. Rubel 2-yr. plants, 65c ea.; \$60.00 per 100; \$580.00 per 1000.

L. J. RAMBO'S WHOLESALE NURSERIES
Bridgman, Mich.

Book orders early.

SPECIMEN EVERGREENS

SNEED NURSERY COMPANY

P. O. Box 798

Oklahoma City, Okla.



Growers of a complete
line of deciduous and
coniferous species.

JEWELL NURSERIES, INC.
Lake City, Minn.

LINING-OUT STOCK

We are now booking orders for Evergreen Rooted Cuttings. We will have one quarter million of the better varieties for shipment during this year. Shipment will begin around April 15. Reserve yours now.

	Per 100	Per 1000
Abella Grand., R. C.	\$ 6.00	\$ 50.00
American Arb., 4 to 6 ft., X.	8.00	....
American Arb., 12 to 16 ft., X.	25.00	....
Juniper Sabina, X, heavy	20.00	....
Taxus Cuspidata, R. C.	10.00	90.00
Taxus Capitata, R. C.	12.00	100.00
Ret. Plumosa, 4 to 8 ft., X.	20.00	....
Ret. Plumosa, R. C.	8.00	....

Many other varieties available later.

ESHAM'S NURSERIES, Frankford, Del.

CONIFERS PIN OAKS

Barberry and General line of
Ornamentals.

Refer to price list in **February 1**
issue of American Nurseryman, or
write us for reprint.

HOWARD-HICKORY CO.
Hickory, N. C.



Wholesale growers of the best
Ornamental Evergreens,
Deciduous Trees,
Shrubs and Roses.

Write for our current trade list.

THE KALLAY BROTHERS CO.
Painesville, Ohio

OUR new Wholesale List is ready for
mailing. The first in two years. Don't
miss the new patented Barberry and
other novelties.

BURTON'S HILL TOP NURSERIES
Cassstown, Ohio

daughter, Margaret; his father and
stepmother, Mr. and Mrs. Lloyd C.
Stark; one brother, Lieut. John W.,
of the A. A. F., and two sisters,
Mary and Katherine. Services were
conducted at Louisiana, Mo., where
the body was taken.

Ludwig Luck, Sr.

Services for Ludwig Luck, Sr., 58,
of the Meadowbrook Nurseries, Nor-
wood, N. J., were conducted March
25. He died of a heart attack at his
home March 21. He was born in
Germany and had lived at Norwood
for twenty-two years, serving many
years as Norwood's shade tree com-
missioner. Survivors include his wid-
ow, Mrs. Anna Luck; one son, Lud-
wig, Jr., and one daughter, Marie.

Mrs. Harriet Ilgenfritz.

Mrs. Harriet Ilgenfritz, widow of
the late Edgar C. Ilgenfritz, son of
the founder of the Monroe Nurseries,
Monroe, Mich., died at the age of 83
at her home, at Monroe, last month.

EAST TEXAS ROSE GROWERS.

The East Texas Rose Growers' As-
sociation got under way last month
with twenty-two active members,
growers of the Tyler district, and
four associate members. At the meet-
ing of the board of directors, March
8, it was voted that out-of-state nur-
serymen and Texas nurserymen not
engaged in rose production might be
accepted as associate members. Cur-
rent expenses are defrayed by the
donations of a half-dozen rose grow-
ers totaling \$520.

The directors discussed fully the
proposed Rose Research Foundation,
which has contracted with Dr. El-
don W. Lyle to undertake a rose
research program. He met the rose
growers at a luncheon at the Black-
stone hotel, Tyler, April 6.

The resolution of the National
Plant Board approving a proposed
new section of the plant quarantine
act which would arm the Secretary
of Agriculture against movement in
the United States of infested nursery
importations was adopted.

At a meeting of the general mem-
bership, March 9, the progress of
the organization was explained by
Clark Kidd. Thirty growers present
indicated by unanimous vote their
support of the research foundation.
Letters were read from out-of-state
nurserymen expressing their interest.

By their origination of the rose re-
search foundation the following elev-
een men are expected to become trust-
ees of the new corporation: Jesse
Breedlove, Carl Shamburger, Homer
W. Eikner, Howard W. Ford, Sam

SPECIAL FROM HOLLAND

I have been able to secure from
Holland some additional stock, es-
pecially Magnolia, which will be in
during the week ending April 13.
(Before this advertisement ap-
pears.)

I will have the following, subject to prior sale.	
200 Cornus Florida Rubra, 2 to 3 ft.	\$1.25
225 Laburnum Vossii, 2 to 3 ft. ....	.75
1000 Magnolia, in variety, nice young stock.	
Soulangiana, Stellata, Alexandrina,	
18 to 24 ins.	1.00
150 Fagus Riversii, 2 to 3 ft.	1.25
75 Philadelphus Virginalis, 2 ft. ....	.30
50 Philadelphus Virginalis, 1-yr. cuttings...	.10
90 Aristolochia Sipho, 2-yr. ....	.25
150 Kerria Jap. Florepleno, heavy,	
1 1/2 to 2 ft. ....	.30
50 Deutzia Gracilis, 1 1/2 to 2 ft. ....	.30
25 Viburnum Rhytidophyllum, 1 1/2 to 2 ft.	1.00
10 Viburnum Juddi, new, 12 to 15 ins.	1.00
50 Prunus Serrulata, 2 to 3 ft.	1.00
75 Cydonia "Orange-red," 15 to 18 ins. ....	.25
25 Azalea Pontica, with buds, 15 to 18 ins.	1.50
25 Azalea Mollis, with buds, 15 to 18 ins.	1.50
10 Syringa Microphylla, new, 18 to 24 ins. ....	.75
200 Laburnum Vossii, heavy, 2 to 3 ft. ....	.75

Packing at cost.

This is excellent stock. Special clean-up prices.
Wire your order.

For Lining-out Stock see our advertisement on page
35 of the April 1 American Nurseryman.

ARTHUR DUMMETT

Phone: Bernardsville 8-1340

63 Anderson Rd., Bernardsville, N. J.

WRITE US ABOUT—

- Evergreen Liners
- Shade Trees
- Specimen Evergreens
- Flowering Shrubs
- General Assortment
of Stock.

SHERMAN NURSERY CO.
Charles City, Iowa

ORNAMENTALS TREES SHRUBS EVERGREENS

Wholesale growers of a
general assortment for
the best Landscape Plantings

BRYANT'S NURSERIES
PRINCETON ILLINOIS



EVERGREENS

Growers of Quality Evergreens
Lining-out Stock a Specialty
Write for Trade List

EVERGREEN NURSERY CO.
Established 1864 : STURGEON BAY, WIS.

SURPLUS BERRY PLANTS**50,000 BLACK RASPBERRIES.**

No. 1 tips.

Cumberland, New Logan, Shuttleworth.

70,000 RED RASPBERRIES.

No. 1 suckers.

Indian Summer, Chief, Latham.

15,000 RED RASPBERRIES.

No. 1 transplants.

Indian Summer, Chief, Taylor.

5,000 SODUS PURPLE RASPBERRIES. No. 1 tips.**5,000 CURRANT PLANTS.** 2-yr.

No. 1 and 2-yr. No. 2.

Pres. Wilder, Perfection, Red Lake.

H. E. CONGDON NURSERY

North Collins, N. Y.

GRAPEVINES, CURRANTS, GOOSEBERRIES and BERRY PLANTS

Can also supply Currant lineouts and cuttings.

Known to the Wholesale Trade for Small Fruit Plants of Superior Quality Since 1890.

F. E. SCHIFFERLI & SON NURSERIES

Fredonia, N. Y.

5000 JUNIPERS, B&B

F.O.B. trucks at nursery.

Pfitzeriana, 2 to 3 ft. and 3 to 4 ft.

Hibernica, 3 to 4 ft. and 4 to 5 ft.

Ashfordi, 2 to 3 ft.

Andorra, 1 1/2 ft.

Hill's Golden Pfitzer, 2 to 3 ft.

One block of 2000 assorted evergreens at Ashford, N. C. A-1 condition; half in B&B sizes. Close to quick transportation, freight or highway.

HUMPHREYS LANDSCAPE SERVICE

Mt. Sterling, Ky.

KEPLINGER'S ORIGINAL STRAIN**Gem Everbearing Strawberry Plants**

13 years of scientific improvement of original strain, outyielding all others 3 to 1, spring and fall.

Per 1000

The world's best GEM stock plants\$25.00
America's finest GEMZATA plants 35.00

All plants F.O.B. here; Red Stele disease-free.

HEART-O-MICHIGAN FARMS & NURSERIESFrank J. Keplinger, Prop.
Farwell, Mich.**300 Juniper Pfitzeriana**

High crown specimen, 3 to 4 ft.

\$1.00 each, in the field.

KANSAS EVERGREEN NURSERIES

Manhattan, Kan.

Whiteside, Starley Hand, W. G. Atwood, A. F. Watkins, L. B. Dean, B. L. House and Paul B. Brush.

East Texas roses will be broadly advertised by a large garden which has been planted by this association at Pounds field. Delta, Dal-Air and Texas Airlines now have twelve flights daily through Tyler. The administration building is the center of numerous large beds, each holding a selected variety of top-grade roses. This garden was set at a cost of \$462. Maintenance will be by Tyler park department and Pounds field employees. A sign will be erected identifying this work of east Texas growers. When commercial fields are in bloom it is planned to request the air hostess of each flight to distribute to her passengers a rose for lapel or dress. This is expected to advertise Tyler and east Texas roses at little expense to any one member.

FRISCO CAMELLIA SHOW.

The San Francisco camellia show attracted a large number of visitors, March 13 and 14.

In the rotunda of the City Hall, flower arrangements were exhibited around the walls; tables were placed near the wide stairway for the exhibition of single blooms, and several complimentary commercial showings were arranged at another end of the floor space.

Since it was an amateur event, prizes were given only to nonprofessional winners.

The University of California's botanical gardens, Berkeley, had an interesting collection of varieties, as did the Smyth Camellia Nursery, Ross; the East Bay Nursery, Berkeley, and Camellia Hall, Sacramento. The Domoto Nursery, Hayward, entered one of the noncompetitive exhibits.

OREGON RESEARCH FUND.

The executive committee of the Oregon Association of Nurserymen, upon a vote of the advisory board, has given attention to the matter of raising funds for the support of an expanded experimental program in the state.

It is proposed that each group raise a minimum quota among its members, the groups including narcissus growers, lily bulb growers, florists, gladiolus bulb growers, and ornamental and fruit tree growers.

The grand total for all groups has been set at a minimum of \$4,000, to be raised as soon as possible. It is needed to fill in the year from July, 1946, to July, 1947. All money raised will be deposited in the re-

The lovely**Yellow****Rose****V for Victory**

and other

SUB-ZERO HYBRID TEAS

Large and beautiful as any.
Easy to grow and long to live.
Save replacement expense.
Also Yellow and Orange Climbers.

Write for trade prices to

BROWNELL ROSES

LITTLE COMPTON, R. I.

**SPRING Wholesale Price List 1946****HARDY CHRYSANTHEMUMS**

Spring delivery about April 15, weather permitting. Delivered express paid to your office. Order now.

	CUSHION	Per 1000
Pink	.....	\$25.00
Red	.....	25.00
Bronze	.....	25.00
White	.....	25.00

	SEMITALL	Per 1000
Early Yellow	.....	\$25.00
Early Bronze	.....	25.00
Marjorie Mills	.....	35.00
Algonquin	.....	35.00
Pygmy Gold	.....	25.00

250 at 1000 rate. 100, \$4.00; 25, \$1.00.
No. 1 rooted divisions, 25 in bunch. Labeled for color. Cash with order.

O. K. NURSERY

Route 2, Buchanan, Mich.

HARDY CHRYSANTHEMUMS

Field-grown, rooted divisions Per 100

Autumn Lights, single, reddish-bronze	.....	\$6.00
Calliph, double, oxblood-red	.....	6.00
Country Girl, single, pink	.....	6.00
Evelyn, double, reddish-bronze	.....	6.00
Goblin, Pompon, bronze	.....	5.00
Jean Treadway, double, pink, dark pink center	.....	6.00
Judith Anderson, Button, yellow	.....	6.00
Pygmy Gold, short yellow Pompon	.....	6.00
White Gull, short, white Button	.....	6.00
Pink Cushion	.....	3.75
Bronze Cushion	.....	3.75
Red Cushion	.....	3.75
White Cushion	.....	3.75
Yellow Cushion	.....	3.00

25 at the 100 rate minimum order \$2.00.
10% discount on 1000 of one variety.

C. J. DUNN

Route 3, Box 71 Benton Harbor, Mich.

WE WILL NOW MAKE GROW CONTRACTS FOR 1946-47 For Peach and Apple.

We specialize in the propagation of the Peach and Apple. We own the exclusive budding rights of the famous Hale Gold Peach. You will like it. Write us for certified statements as to its great merits. We also grow the Dixie Red and Dixie Gem. Grow Contracts before budding time enable us to make the price much cheaper; besides, you can be sure of getting what you want.

S. M. Phillips Nursery Co.
Smithville, Tenn.**COLORADO - GROWN CHINESE ELM**

A Limited Supply of most sizes yet available. Write for List.

SWINK NURSERY

R.F.D. 3, La Junta, Colo.

APPLE AND PEAR GRAFTS

We are starting to line out our **Apple** and **Pear Grafts** within the next few days. Advise wiring in orders at once. Have **Apple Grafts** in leading varieties. **Pear Grafts** only in **Flemish Beauty** and **Anjou**, **Lincoln** and **Kieffer**. Sold out of all other varieties.

We still have a few thousand **PEACH** in leading varieties; also **1-year-old APPLE WHIPS**, 2 to 3 ft., 3 to 4 ft., and 4 to 5 ft., **Red** and **Golden Delicious**, **Jonathan**, **Grimes**, **Stayman**, **York**, **Winesap** and **Transparent**.

SHADE TREES, 6 to 8 ft., to 3-in. cal., in **Gum**, **Elm**, **Maple**, **Poplar**, **Oak**, **Ash**, **Redbud** and **Black Walnut**.

Amur River Privet, 18 to 24 ins. and 2 to 3 ft.

EGYPTIAN NURSERY CO.

Farina, Ill.

RED LAKE CURRANTS**RED RASPBERRIES**

Hansen's **BUSH CHERRY**

PARADISE ASPARAGUS

ANDREWS NURSERY CO.

FARIBAULT, MINN.

WANTED**FRUIT TREE STOCKS**

Apple, **Pear**, **Plum** and **Cherry**

Also **Rose Seedlings** for budding.

STORRS & HARRISON NURSERIES, INC.

Painesville, Ohio

FRUIT TREES

AND

SMALL FRUITS**HARRISON BROTHERS NURSERIES**

G. Hale Harrison, General Manager

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GREEN ASH

6 to 8 ft. Per 100 \$ 55.00
8 to 10 ft. 65.00

Packing at cost.

DAHLBERG NURSERIES

Ladysmith, Wis.

search gift account of the state experiment station, with use restricted to problems of research in this field. Such funds cannot revert to another account, but will carry over from year to year to be used for the purposes intended. After this year a more permanent method of supplying the money will be established.

The suggested basis for donations is \$1 per \$1,000 of gross nursery business. Checks, designated for the insect pest and disease fund, should be made payable to Samuel J. Rich, chairman, and mailed to him at Route 4, Hillsboro, Ore.

WASHINGTON NURSERYMEN GUESTS OF ARBORETUM.

Members of the Washington chapter of the American Association of Nurserymen and the Washington State Association of Nurserymen were guests of Dr. John Hanley, director of the University of Washington Arboretum, Seattle, March 18.

The speakers for the evening were Otto Holmdahl, landscape architect; Dr. Gould, plant pathologist, Puyallup experimental station, and Dr. John Hanley. Paul Brown showed colored slides of rare plants. Displays of rare camellias and azaleas were shown by Carol Wieting.

The A. A. N. chapter's business meeting was conducted by O. R. Adams, president of chapter 28, Richmond Beach, Wash. R. R. Williams, Tacoma, president of the Washington State Association of Nurserymen, presided over a short business meeting.

A committee was appointed by the A. A. N. chapter for the purpose of assisting in the formulation of plans for the establishment of an extension course at the University of Washington for nurserymen, landscape architects and their employees. This course of study will be under the direction of Dr. John Hanley and sponsored by the University of Washington Arboretum.

PASADENA ROSE SHOW.

The eighth annual rose, iris and flower arrangements show will be held at the Fannie E. Morrison Horticultural Center, Brookside park, Pasadena, Cal., May 11 and 12, announces E. F. Elmer, president of the Pacific Rose Society. Schedules and other information can be obtained from the Pacific Rose Society, 1044 Olive Lane, La Canada, Cal.

THE Worsman Nursery has been opened by Robert Worsman at 11250 Venice boulevard, Culver City, Cal.

NORTHERN-GROWN STOCK

First-class stock that will reach you in good condition, even if your season is advanced.

White or Canoe Birch. Per 10
8 to 10 ft. \$5.00

White or Canoe Birch. Per 100
5 to 6 ft. \$16.00

White Pine Seedlings, 4-yr. select.
12 to 15 ins. 6.00

White Pine Seedlings, 3-yr., Per 1000
6 to 8 ins. \$20.00

OSTRICH PLUME FERNS.

Hardy. 75 per cent sun. 2 1/2 to 4 ft. high. Multiplies with root runners. A very good salesyard item. Large clumps.

\$6.00 per 100

No C.O.D. This stock will please you.

J. R. PALMER & SON

Blackduck, Minn.

WHOLESALE PRICES**THORNLESS BOYSENBERRIES**

Hardy, Northern-grown

1-Year Plants

100 \$ 6.00
250 12.00
500 23.00
1000 45.50

Order Direct from This Ad.

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ST. REGIS (RANERE)

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Strong, well rooted No. 1 stock.

Can supply limited quantities heavy transplants in **St. Regis**.

Now in storage; can give immediate shipment.

Let us quote on your needs.

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WASHINGTON ASPARAGUS ROOTS

1-yr. and 2-yr.

The very best roots we have ever grown. All state inspected. Can furnish in quantity lots. Write for prices.

PAW PAW NURSERIES

Frank Nelson

Paw Paw, Mich.

We wish to purchase...

Evergreens, Fruit Trees, Shrubs, etc.

Send your surplus list to

THE PONTIAC NURSERY CO., Romeo, Mich.

CALIFORNIA DIRECTORS PLAN ASSOCIATION MEET.

Setting a record for the amount of business accomplished in so short a time, the 12-man board of directors, the president and vice-president of the California Association of Nurserymen met at Santa Barbara, March 11 to 13. Fourteen major items of business were disposed of in a day and a half of business sessions without a dissenting vote being cast on any measure.

Presided over by President Paul Molder, the directors moved efficiently through a set of measures recommended by the executive secretary, Jack Lincke, of Los Angeles. These items set up a state-wide labor relations program for the industry which contains, among many other points, the adoption of group health and accident protection for nursery employees; an employee profit-sharing bonus plan; a wage survey and a job evaluation program; a state-wide public relations program aimed at not only promoting the nursery industry but also selling the association to the purchasing public; plans for sustained membership drives; proposed amendments to state legislation affecting the nursery industry and examining the desirability of presenting favorable items of legislation at the next regular session of the state legislature; formulation of plans to obtain an annual census of California nursery production and the gross monetary worth of this; auditing of association financial matters; suggestions for expanding the functions of the executive secretary's office.

Of principal value to association members was the endorsement by the directors of a plan set up by the executive secretary under which the organization can carry its compensation insurance as a group. This, according to Secretary Lincke, would result in savings of from forty to sixty per cent of the funds currently being paid by the members as workmen's compensation insurance premiums. This, he pointed out, will not only provide free membership in the association to all of those admitted, through refunds of insurance premiums, but will also result in appreciable additional savings for all of those hiring five or more employees. The adoption of this measure alone will make the California Association of Nurserymen cost-free to every member who employs labor.

All seven chapters of the association were fully represented throughout the sessions and were gratified to learn that since last June the paid membership of the organization has



Introducing the NEW STREAMLINER Everbearing Strawberry

EXCELLENT—Firm shipping berry; rich, radiant red color; full strawberry flavor; good canner and freezer; heavy bearer; excellent aroma; sturdy plant with luxurious green foliage.

Plants are available in four colors or in black and white of the new Streamliner strawberry for use in your catalogs.

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FRUIT TREES and GRAPEVINES

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PLANT-CHEM SALTS GROW PLANTS with SOIL or without

The balanced plant food with complete nutrients, all trace elements and plant hormone. Attractive, easy to handle, 10c to \$15.00.

Top seller . . . Profitable . . . National advertising . . . Immediate delivery . . . Write today.

PLANT-CHEM, INC.

1355 Market • San Francisco 3

Pour it on • Watch 'em Grow!

increased fourfold and that the group is in excellent financial condition.

Representatives were entertained at dinner the first evening by Bert Kallman, Jack Hume, Clarence Mets and C. Mavro Warren, prominent

Items to offer for 1946 Delivery

BERRIES, general list
PEACH TREES
FIG TREES
GRAPES, complete assortment
WHITE BIRCH, 8 to 10 and 10 to 12 ft.
DOGWOOD, Florida white
DOGWOOD, Pink-flowering
NORWAY MAPLE, 8 to 10 and 10 to 12 ft.
HORSE CHESTNUT, Red
GINKGO BILOBA
OAKS, Red Scarlet and Pink
DECIDUOUS SHRUBS in variety
CLIMBING and RAMBLER
ROSES in variety

RICH & SONS NURSERY
Rt. 4, Hillsboro, Ore.

GRAPEVINES

EUROPEAN TYPE, table varieties.
Thompson Seedless, early, white.
Monukka Seedless, early, black.
Malaga Red, early, large.
Malaga White, midseason, large.
Ribier, large, midseason, blue.
Muscat, large, midseason, white.
Lady Finger, long, midseason, white.
Black Hamburg, midseason, large.
Tokay, large, late, red.
Emperor, late, red.
Black Malvoise, table or wine.

WINE VARIETIES.

Alicante , red.	Carignane , black
Golden Chasselas .	Grenache , black.
Mission , black.	Zinfandel , black.
1 yr., No. 2	2 yr., No. 1
10 for \$1.00	10 for \$1.50
100 for \$9.00	100 for \$13.50
1000 for \$80.00	1000 for \$120.00

Packing free if cash with order.
Pierce and Phylloxera certificate.

GRIMSHAW CITRUS NURSERY

1021 Dublin Blvd., Hayward, Calif.

Learn LANDSCAPE GARDENING

A thorough interesting home training covering your regional conditions for both those who wish to become **LANDSCAPERS, DESIGNERS and GARDENERS**, and those who wish to learn for their own use and pleasure.

EMPLOYEE TRAINING
Nurserymen from Maine to California are using this training to upgrade employees. It may be of help to your organization.

Send for **FREE Information**
National Landscape Institute
Dept. N-4, 758 So. Broadway, L. A. 14, Calif.

CHARLES SIZEMORE Traffic Manager

319 1/2 Georgia St., Louisiana, Mo.

Loss and damage claims against railroad and express companies collected.

Freight bills audited.

Past due notes and accounts collected.

Well known to the nurserymen of the country.

Reference: Bank of Louisiana.

PRONOUNCING DICTIONARY of Plant Names

64 pages, 3000 names, 25c per copy
American Nurseryman Chicago

Santa Barbara and Ventura nurserymen. Mr. Kallman also entertained the assemblage at luncheon on the second day at Santa Barbara's colorful El Paseo.

The directors took cognizance of the fact that at some future time current shortages of nursery stocks perhaps will not exist and members of the industry will have to merchandise on an intensive scale to compete for a share of the consumers' spending money. Consequently, it is the intention of the California industry to attempt to maintain prices at such a level that equitable rates can be paid to its employees and good-quality merchandise can always be furnished to the public. An item of this obviously is the analysis of production and distribution of costs which have been facilitated by an excellent, concise cost accounting plan sent to all members by the executive secretary.

The directors were fully informed of the current attempts of organized labor to unionize the nursery industry and the implications of this were outlined to those present.

Tentative plans were made for the annual convention, which will be held at Oakland during the latter part of September and which will be closed to everyone except members and their invited guests.

At the conclusion of the meeting, President Moulder complimented the directors upon their 100 per cent attendance at all sessions and the expeditious manner in which they disposed of the large volume of work brought before them. He also thanked them for the excellent spirit of harmony that prevailed at all times and the unanimity of their thoughts upon all of the measures considered.

The following directors, officers and staff members were present at the meeting: John A. Armstrong, Fred Hammarstrom, Stewart F. Henson, Bert Kallman, Paul Kleinsorge, Erich Regan, L. P. Sorenson, Louis Vistica, Frank James, Clyde Stocking, director-at-large; Paul Moulder, president; Charles Armstrong, vice-president; Jack Lincke, executive secretary; Esther McConnell, office assistant. Jack Lincke, Sec'y.

SUPERIOR CALIFORNIA CHAPTER MEETS.

The Superior chapter of the California Association of Nurserymen met March 13 at the Alhambra Italian restaurant and cafe, Sacramento. There were thirty-five members and guests present.

The meeting was called to order by Vice-president Walter Tecklenburg, of Lodi. Elmer Merz, president, was

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Quality Stock

CONIFERS AND BROAD-LEAVED
EVERGREENS
SHADE AND FLOWERING TREES
FRUIT TREE SEEDLINGS
FRUIT TREES
DECIDUOUS SHRUBS
VINES AND BULBS
PORTLAND ROSES

Our catalog for 1945-46 is now out of date. It is not likely that we will print our 1946-47 edition until September 1.

New prices for the coming season will probably be established in May. The supply in many lines will be limited again.

Write for our Catalog

A. MCGILL & SON

FAIRVIEW, OREGON

Wholesale Only

GOOD WESTERN-GROWN NURSERY STOCK

Fruit Tree Seedlings
Flowering Ornamental Trees
Shade Trees

Grown right and packed right.
Combination carloads to Eastern
distributing points will save you
on freight.

MILTON NURSERY CO.

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MILTON-Since 1878-OREGON

**Our Fruit Tree Seedlings
now graded.**

We have surpluses of desirable grades of almost all varieties.

Telegraph your inquiry at our expense.

Eastern cars now being shipped.

Combination carloads to eastern distributing points at minimum freight cost.

AS ALWAYS— OREGON'S BEST SOURCE of GOOD ROSES

PETERSON & DERING

*Wholesale Rose Growers
Scappoose, Oregon*

1000 Specimen Dwarf Boxwood, 18 to 24 in.
500 Green Aucubas, 2 to 3 ft.
150 Dwarf Alberta Spruce, 2 to 3½ ft.
50 Juniper Meyer, 3 to 4 ft.

All stock with perfect fiber roots.

F. A. DOERFLER & SONS
Salem, Ore.

DOTY & DOERNER, Inc.

6691 S. W. Capitol Highway

Portland 1, Oregon

**Wholesale Growers
of
General Nursery Stocks**

NOTICE

Decreased production makes it impossible to book orders for new customers. For the duration the limited supply is reserved for our regular trade.

HOWARD ROSE CO.
Hemet, California

BALED SHINGLE TOW

(CEDAR SHAVINGS)

WM. A. JOHNSTON

408 Postal Bldg., Portland 4, Ore.

SHINGLE TOW

(Baled Cedar Shavings)

Immediate shipment carload lots.

MONARCH SHINGLE CO.

P. O. Box 37 North Portland, Ore.

attending a directors' meeting being held in southern California.

D. A. Sherwood, of the Germain Seed & Plant Co., introduced his son, who had just returned from service overseas.

Louis Vistica, state director for the chapter, made a fast trip from the directors' meeting held in southern California, to give a brief report on the meeting.

Unanimous vote was cast for directors of the local chapter that were nominated at the preceding meeting. They are Louis Lagomarsino, Don Wiese, Gene Armstrong and Fred Wittsche.

Vice-president Tecklenburg made the following appointments: Membership committee, Don Wiese and Peter Cruz. Publicity committee, Ray Heintz. Public relations committee, Gene Armstrong, John Lagomarsino and Charles Staats.

A hearty thanks was given to Fred Wittsche for his work in setting up the association's display at the camellia show March 9 and 10. It was reported by Don Wiese that the broadcast of the camellia show, sponsored by the chapter, was very successful.

Dr. McLeod, formerly of War Food Administration, Washington, D. C., and now technical vice-president of Sunland Industries, delivered an interesting talk. His job at Washington was claimant for all chemicals that go into agriculture, including fertilizers, insecticides and fungicides. He gave a brief review of how these materials were made and stated a few facts and figures on the amounts used. Dr. McLeod stated there were 685 chemicals used during the war. Ray Heintz, Sec'y.

CALIFORNIA NOTES.

Another new retail nursery in the San Francisco area is Mike's Nursery, at San Mateo, on Bayshore drive and Third avenue, which includes an attractive sales yard and building.

The Huber Nursery, also in the same area at San Mateo, has built a large new office and salesroom on the property adjacent to the nursery.

Citrus production in California has increased from 850,000 tons in 1914 to 6,000,000 tons in 1945. Some nurserymen who propagate citrus trees feel there will be little if any large plantings for several years and are reducing the number of trees for grove uses. However, the great increase in population in the state and the desire of nearly all of the homeowners to have one or more orange trees in the yard have resulted

PAPER and WOOD LABELS

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PRINTED WOOD LABELS—200 of variety or your name and address—3 lines

4"x½"	POT LABELS—Price per M—	5M—4.00	10M—3.75	25M—3.50	50M—3.25
5"x½"	" " " " " "	5M—4.50	10M—4.00	25M—3.75	50M—3.50
6"x½"	" " " " " "	5M—5.00	10M—4.25	25M—4.00	50M—3.75
3½"x½"	TREE LABELS " " " "	5M—4.50	10M—4.00	25M—3.75	50M—3.50

CEDAR EXTRA WIDE WOOD LABELS—Printed 3 lines—Minimum 5M—500 of a kind

5¾"x¾"	5M—5.00	10M—4.50	25M—4.00	50M—3.50
5¾"x1"	5M—5.25	10M—4.75	25M—4.25	50M—3.75

PAPER LABELS—Printed

7"x½"	ROSE LABELS—Multiples of 100 of variety	\$1.75 per 1000
9"x¾"	FRUIT LABELS—Multiples of 100 of variety	\$2.25 per 1000
9"x¾"	WHITE ADVERTISING LABELS—3 lines	1M—3.50 5M—15.00 10M—27.50
9"x¾"	RED "SOLD" LABELS—Your name, address	1M—3.75 5M—16.25 10M—30.00

RUBBER BUDDING AND GRAFTING STRIPS

4"x3/16"	Approximately 1500 to lb.	1 to 9 lbs. \$1.50 lb. 10 to 49 lbs.
6"x3/16"	Approximately 1000 to lb.	\$1.20 lb. 50 to 99 lbs. \$1.00 lb.
5"x3/16"	Approximately 1200 to lb.	100 to 500 lbs. \$.90 lb.

F.O.B. PASADENA—ALL SHIPMENTS MADE TRANSPORTATION COLLECT.
5% DISCOUNT ALLOWED IF CHECK COMES WITH THE ORDER ONLY.

CARSCALLEN NURSERY LABEL CO.

65 WEST UNION
Phones SYcamore 3-9181

PASADENA 1, CALIFORNIA
L. A. Phone RYan 1-6118

LINDIG'S SOIL SHREDDER



New improved model

Engineered for the perfection of soils.

Prompt delivery.

Write for folder and price list.

Lindig's Mfg. Co.
1875 W. Larpent Ave.
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Special equipment built to your specifications.

SHINGLE TOW

Baled and Loose.

Carload shipments only.

From Wisconsin and Michigan.

SHAVINGS & SAWDUST CO.
330 S. Wells St., Chicago 6, Ill.
Phone: HARison 3300

BULK & CO., Nurserymen.
of BOSKOOP, HOLLAND
Experienced Exporters of Nursery
Stock since 1914.
ASK FOR CATALOG

HYPONEX PLANT FOOD

CLEAN—ODORLESS—SOLUBLE—POWDER

USE HYPONEX to grow bigger and better flowers and vegetables in poorest soil—even in sand, clinders or water. Excellent fertilizer for trees, shrubs, lawns and houseplants.

USE HYPONEX for top dressing, seedlings, cuttings and transplants. Produce strong root systems and stems, also more and larger flowers and fruit.

SELL HYPONEX to your customers. Nationally advertised.

1 oz. packet...16c—packed 12 to case—wt. 7 lbs.
5 oz. can...25c—packed 36 to case—wt. 12 lbs.
7 oz. can...50c—packed 24 to case—wt. 14 lbs.
1 lb. can...\$1.00—packed 12 to case—wt. 16 lbs.
10 lb. drum \$8—25 lbs. \$15—50 lbs. \$25—100 lbs. \$40
Commercial growers and dealers receive 33-1/3% discount from the above retail prices.

BUY HYPONEX from your jobber or send \$1 for 1 lb. (makes 100 gallons). \$1 credited on first order for 1 drum or case.

HYDROPONIC CHEMICAL COMPANY, Inc.
315 West 39th Street, New York 18, N. Y.



For Treating Cuttings and Seeds Bulbs and Tubers

Scientific Growth Stimulant
Write for Free Booklet

SCHUYLKILL CHEMICAL CO. 2340 Sedgley Ave. Philadelphia 32, Pa.

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AMERICA'S FINEST
KATHISH BRAND
Rubber Bands
Arrows
Shedding Strips
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Gloves
Spools Rubber
Belts
Hoses
* GET OUR CATALOG AND PRICE SHEET
BROADWAY RUBBER MFG. CO. LOUISVILLE 2, KY.

in a demand for the trees in containers for retail purposes.

Humboldt county set out over 250,000 strawberry plants in March of this year. Most of the plants were Oregon-grown.

C. E. Coleman, senior member of the firm of Coleman & Sutter, which have grown many thousands of strawberry plants in Oregon during the past few years, is moving much of his nursery to a new location, near Fresno, Cal., because of the better growing conditions there. He plans also to open a branch in Colorado.

There was less rainfall in California in January, 1946, than in any January since 1925. The rainfall in December, 1945, however, was much above the average and the total to date is about average. The lack of rain in the first three months of this year has resulted in much earlier irrigation than is usual. Snow in the mountains is about average; so no water shortage is expected this year.

The Imperial valley has more than 12,500 acres of canteloupe covered with caps. This is an increase of over fifty per cent and is caused in a large part by the loss some growers took last year from late frosts which ruined the uncovered plants.

Farm income in 1945 exceeded \$1,500,000,000 in the state and was the highest in the United States.

The use of the 2,4-D weed sprays in pastures for the control of weeds has not proved harmful to sheep or cattle, according to a recent report from the United States Department of Agriculture. However, care should be taken regarding the type of spreader used, for some of the spreaders seemed to be harmful.

Dusting field and nursery crops from airplanes seems doomed to pass out of the picture, in this state at least, because more advances are being made in spraying from planes. The spraying has many advantages over the dusting, but has been handicapped in the past by lack of equipment.

The Burr-Christensen Nursery, at Hayward, has added a flower display box to its equipment and offers cut flowers from the established retail nursery. No make-up work is yet being done there.

Creeping red fescue is being recommended by lawn makers as the ideal lawn grass in shaded areas in the San Francisco region. It has been used for about three years and is felt by many to be superior to bluegrass in many ways. W. B. B.

HARMON'S NURSERY has been opened adjoining the City Hall at Newman, Cal.

WANT ADS

Help and Situation Wanted and For Sale advertisements.

Display: **\$2.50** per inch, each insertion. **Lines: 20c** line; minimum order **\$1.00**

FOR SALE

New 2-story office and flower shop, buff brick, fireproof building, built last year, also connecting greenhouses. Established flower, nursery and landscape business for past 25 years. Also 6½ acres of ground planted in salable nursery stock. On same property, a modern 5-room clapboard residence with full basement and floored attic, 4-car garage, servants' house, tool house and barn. Located on main highway and leading suburb of mid-south city; population of 350,000; next to city's leading cemetery, 5 miles from city limits. Price \$95,000.00.

Address No. 431, care of American Nurseryman, 343 S. Dearborn St., Chicago 4, Ill.

FOR SALE

100-acre nursery. Acres in spruce, pines, hedges, shrubs and shade trees. Modern home, tenant house, barns, sheds. Large warehouse on C. M. & St. P. R. R., with office and salesrooms. Privately owned and operated for 30 yrs. Well located on good highways. In prosperous farming community and convenient to Madison. South central Wisconsin.

JOHN R. LEATHERMAN
421 Oak St., Baraboo, Wis.

FOR SALE

Eastern Ohio Nursery. 115 acres, well established wholesale and dealer business, well equipped with residences, barns and greenhouses; sprinkler system, storage, etc. Address Box 422, care of American Nurseryman.

NURSERY FOR SALE

50x50 storage, residence, 40 acres of land, office, barn, tenant house, and all nursery stock on land, tools, implements, team, located on main highway out of Muskogee, Okla., \$12,500.00; half cash.

SNEED NURSERY COMPANY
P.O. Box 798 Oklahoma City 1, Okla.

SITUATION WANTED

Nursery Manager—Possibility to buy. 4 years college education in nursery management; born and raised on nursery; 7 years experience as manager of large nursery well known throughout United States; married, no children; have best of references. Address Box No. 426, care of American Nurseryman.

CAPT. HARRY C. FRANCIS, son-in-law of Bj. Loss, president of the Lake City Nurseries, Inc., Lake City, Minn., has returned from the Philippine islands and intends to join his father-in-law in the nursery business. Captain Francis has had an extensive background in merchandising.

HARRY ENDEAN, of the Endean Nurseries, Richmond Hill, Ont., Canada, has been in Florida vacationing for a few weeks.

HELP WANTED

Experienced nurseryman and sales manager for our branch nursery and garden shop.

Must know perennials and all kinds of nursery stock. Must know how to grow and propagate same. A fine opportunity with a future for the right man. Living quarters on place. State all details as to your experience and references in your first letter.

HILLSDALE LANDSCAPE
R. R. 13, Box 158
Indianapolis 44, Ind.

HELP WANTED

Nursery superintendent for large eastern wholesale firm. Nursery production experience necessary. Age 30 to 40. Want man who will maintain high efficient output, yet warrant respect and cooperation of approximately 150 employees. Salary based on ability and proven record.

Address Box 425, care of the American Nurseryman.

HELP WANTED

Landscape man to make appointments for landscaping in Eastern Massachusetts. Supervise jobs, also sell at nursery grounds. Old, well established landscape nursery firm near Boston. Good salary, house available; excellent future. Please give training, experience, salary earned and when available. No. 430, American Nurseryman, 343 S. Dearborn St., Chicago 4, Ill.

HELP WANTED

NURSERY DIGGING FOREMAN
A man capable of handling several sub-foremen of digging gangs. To such a man we believe we can offer the best position in the industry as to salary, bonus and general working conditions. Address Box 433, care of American Nurseryman.

HELP WANTED

Landscape architect who can call on customers, make planting suggestions, draw plans; only those with college training need apply; permanent, year-around work.

Landscape foreman who knows plant materials, can handle men, read plans, execute work; permanent, year-around work.
JAN B. VANDERBEEK LANDSCAPE SERVICE
North Muskegon, Mich.

HELP WANTED

Young working foreman with sales ability for well established nursery business in midwest area. Good salary and housing. Give experience and references in first letter.

Address Box No. 424, care of American Nurseryman.

WANTED to contact nursery company interested in opening a sub-station in western North Dakota.
Address No. 432, care of American Nurseryman, 343 S. Dearborn St., Chicago.

CLASSIFIED ADS

Five lines, \$1.00,
each additional line 20 cents,
per insertion.

BERRY PLANTS

PIXWELL GOOSEBERRIES AND NEWBURGH RASPBERRIES. Newburgh Raspberries, 1 to 2-yr., \$35.00 per 1000. Pixwell Gooseberries, 2-yr., heavy, 40c each by the 100 or 1000. 10 per cent discount for cash with order.

According to our tests Newburgh is larger, more attractive, firmer and much higher in quality than Latham.

The Pixwell Gooseberry, originated by Dr. Yaeger, of the North Dakota experiment station, is on the recommended fruit list of Minnesota and the Dakotas and will soon be the leading variety. According to the North Dakota station bulletin, Pixwell bears 50 per cent more than Carrie, and the berries are about twice as large. We found this true in our tests; we tested all the leading varieties and found Pixwell the best of all. The bush is fast growing, extremely hardy; berries of super quality, sweet, easy to pick, can be eaten out of the hand, hang on long stems and stay on bushes until fall.

SCHWAB FRUIT FARM & NURSERY
220 N. Fifth St., Mankato, Minn.

RASPBERRY PLANTS 100 1000
Cumberland and Logan, black, \$4.00 \$32.00
No. 1 6.50 60.00
Latham, red, 1-yr., No. 1 5.00 45.00
Latham, red, 1-yr., medium 5.00 45.00
Latham, red, 1-yr., small 5.00 45.00

BLACKBERRIES, root cutting plants.
Eldorado and Alfred, 1-yr., No. 1 4.00 35.00
Eldorado and Alfred, 1-yr., med. 2.50 20.00

STRAWBERRIES, fresh dug. 7.00
Dunlap 1.00 8.00
Robinson and Blakemore 1.15 8.00
Premier 1.50 11.00
Dorsett, Fairfax, Catekill 1.65 12.00
Gem, everbearing 1.65 12.00
Minnesota 1166, everbearing 2.60 20.00
Mastodon, everbearing 2.60 20.00

Write for prices on Grapevines.
E. W. HUEBNER NURSERY
Stevensville, Mich.

STRAWBERRY PLANTS
If you want a reliable source of good new land Strawberry plants, I can furnish up to 3,000,000 at the following prices:

Per 1000
Blakemore \$5.50
Missionary 5.50
Dunlap 6.50
Ambrosia 7.00
New Robinson 7.00
Progressive Everbearing 9.00
Minnesota 1166 Everbearing 15.00

Have grown and shipped plants for 25 years. Plants will be well graded and packed. Reference: Hamilton County Agriculture Department, Courthouse, Chattanooga, Tenn.
W. H. LEAMON, Rt. 1, Ooltewah, Tenn.

CULTIVATED BLUEBERRY PLANTS
Large stock. Wholesale prices. Our prices the lowest. Large demand for Blueberry Plants. Gross returns \$1000.00 per acre for the berries. New Jersey-grown, home of cultivated blueberries. Great for store trade. Plants 1 yr. old this spring, grow a few months until fall, then will be 2 yrs. old and will be ripened in value. Large stock, 1-yr., \$24.00 per 100; 2-yr., 6 to 10 ins., \$50.00 per 100; 2-yr., 10 to 15 ins., \$80.00 per 100. Also 3 and 7 yrs. old.
WARREN SHINN, Woodbury, N. J.

KLEHMS' WHITE CURRANT. Largest white currant known. Sport of Red Perfection. Berries large, very prolific, not as acid as the red currant. Make a fine pink jelly. Small plants by mail postpaid, \$3.00 per 10; \$25.00 per 100; 2 and 3-yr.-old plants by express, \$3.00 per 10; \$25.00 per 100.
KLEHMS' NURSERIES, INC.,
Arlington Heights, Ill.

STREAMLINER EVERBEARING STRAWBERRIES—1000 plants, \$40.00; Minnesota, \$25.00; 500 of each variety, \$30.00. Introducer. Plants in great demand. Grow for 1947. Extraordinary catalog.
Oak Hill Nursery, New Buffalo, Mich.

ST. REGIS and SUNRISE RASPBERRY PLANTS. Smaller canes, \$35.00 per 1000; larger, \$45.00 per 1000, first grade.
WARREN SHINN, Woodbury, N. J.

CONCORD GRAPE CUTTINGS. 200,000 well cared for since being out \$4.50 per 1000.
BENTON COUNTY NURSERY CO., INC.,
Rogers, Ark.

ST. REGIS RASPBERRY PLANTS. Smaller canes, \$40.00 per 1000; larger, \$60.00 per 1000.
WARREN SHINN, Woodbury, N. J.

ELDORADO BLACKBERRY. \$20.00 per 1000. Lucetta Dewberry, \$25.00 per 1000.
WARREN SHINN, Woodbury, N. J.

BLAKEMORE STRAWBERRY PLANTS

Well rooted new land grown.
\$7.50 per 1000, packed in damp moss. Can ship direct to your customers using your tags. A few Concord Grape Cuttings left at \$4.50 per 1000 in 10,000 lots.
IDEAL FRUIT FARM, Stillwell, Okla.

GEM EVERBEARING STRAWBERRY PLANTS

True, unmixed, Iowa-grown, certified. \$14.00 per 1000; 3000 or more, \$12.00 per 1000. Nice plants, freshly dug, careful packing; prompt shipment of orders.
C. D. WRIGHT, Hamburg, Iowa.

THORNLESS Per 100 Per 1000
YOUNGBERRIES \$5.00 \$45.00
STRAWBERRIES 8.00
Varieties: Dunlap and Blakemore.
BENTON COUNTY NURSERY CO.,
Rogers, Ark.

DUNLAP STRAWBERRY PLANTS. Real producers, young, healthy, state inspected, fresh dug, guaranteed to be good plants and to reach you in good growing condition, \$3.00 per 1000. Write for prices on larger amounts.
RILEY'S NURSERY, Concordia, Kan.

Stocky, well rooted **STRAWBERRY PLANTS.** Aroma, Blakemore, Klondike, Dunlap, Premier, \$6.00 per 1000. Mastodon Everbearing, \$7.00 per 1000. F.O.B. McMinnville, Tenn. **SAM PACK & SONS, R.F.D. 5, Smithville, Tenn.**

STRAWBERRY PLANTS—Certified, Iowa-grown; Dunlap, Blakemore, Beaver, \$8.00 per 1000. Minnesota 1166 Everbearing, \$20.00 per 1000. Fresh plants, prompt shipment.
RIDER NURSERY, Farmington, Iowa.

EVERBEARING STRAWBERRY PLANTS. 1,000,000 Gem at \$12.50 per 1000. Also St. Regis (Fvb.) Raspberry plants at \$30.00 per 1000. Cash. F.O.B. Hamilton, Mont.
DAVIS & DAVIS, Hamilton, Mont.

STRAWBERRY PLANTS. Certified, hardy northern-grown Dunlap, \$8.00 per 1000; fresh plants. Prompt shipment.
IOWA NURSERY, Farmington, Ia.

CUMBERLAND RASPBERRY, No. 1 Tips. In cold storage and perfectly dormant. \$3.00 per 100, \$75.00 per 1000. No packing charge.
BLUE RIDGE GARDENS
Roanoke, Va.

EVERBEARING STRAWBERRY PLANTS—Gem, \$12.50 per 1000; Minn. 1166, \$18.00 per 1000; Bruno's Marvel and Gemma, \$25.00 per 1000; Streamliner, \$40.00 per 1000.
DOLLAR NURSERY, Bloomfield, Ia.

Thornless Boysenberry, Black Diamond Climbing Berry, Cumberland Black Raspberry.
WARREN SHINN, Woodbury, N. J.

POTTED STRAWBERRY PLANTS. Several varieties, \$9.00 per 100; also Everbearing, \$11.00 per 100.
WARREN SHINN, Woodbury, N. J.

BULBS

DAHLIA BULBS
50 Corrine (yellow), each \$0.50
50 Kokomo, each 1.00
50 Carl Dehl, each60
50 Rose Glory, per 10 3.00
300 Jean Kerr, per 10 2.50
125 Ida De Van Warner, per 10 3.50
100 Jane Cowi, per 10 2.00
300 Pink Lassie, per 10 3.00
300 Josephine, per 10 3.50
200 Pride of California, per 10 2.50
135 Buckeye Baby, per 10 2.50
100 Kathleen Norris, per 10 3.00
25 Jersey's Beauty, per 10 3.50
30 Michigan White, each 1.00
Some other good varieties priced on request.
BONNER SPRINGS NURSERIES
Will J. Kern, Prop.
R. 2, Box 158
Bonner Springs, Kan.

CANNAS

Select stock 3 to 5 eyes, dormant roots. City of Portland, pink. The President, scarlet. King Humbert, red. Yellow King Humbert. \$5.50 per 100, \$50.00 per 1000. Ask for prices on Glads, Dahlias, Tuberoses, etc.
GILMORE PLANT & BULB CO., INC.
Julian, N. C.

CANNA

200,000 President, Flaming Scarlet, 4 ft. green foliage, carefully grown under our personal supervision, guaranteed true to name. Strong, 2 to 5-eye divisions, liberally graded, \$8.00 per 100, \$80.00 per 1000.
MRS. CHARLIE ROBINSON, Greenville, Ga.

CITY OF PORTLAND CANNAS

Dormant roots, \$5.00 per 100.
WAYNSBORO NURSERIES
Waynesboro, Va.

Surplus Stock
can be easily and quickly turned into Cash
Listing it in the
American Nurseryman Classified Ads.

EVERGREENS

EVERGREEN LINERS

Hardy northern-grown
SPRUCE Per 100 Per 1000
Norway, 5-yr. T, 8 to 10 ins. \$13.00 \$110.00
White, 5-yr. T, 10 to 14 ins. 15.00 130.00
White, 3-yr. T, 4 to 8 ins. 6.00 50.00
White, 3-yr. S, 5 to 7 ins. 3.00 25.00
Black Hills, 5-yr. T, 8 to 10 ins. 12.00 110.00
Black Hills, 5-yr. T, 10 to 14 ins. 14.00 125.00
Black Hills, 3-yr. S, 5 to 7 ins. 6.00 48.00
Colo. Blue, 3-yr. S, 4 to 6 ins. 4.50 35.00
Colo. Blue, 3-yr. T, 3 to 5 ins. 5.50 45.00
Colo. Blue, 4-yr. T, 4 to 8 ins. 7.00 62.00
Black Spruce, 2-yr. S, 3 to 5 ins. 2.50 18.00
Black Spruce, 3-yr. T, 3 to 5 ins. 5.00 45.00
Black Spruce, 5-yr. T, 24 to 36 ins. 15.00
Engelmann Spruce, 4-yr. T, 3 to 5 ins. 7.00 60.00
PINE
Norway, 2-yr. S, 5 to 7 ins. 2.50 16.00
Norway, 4-yr. S, 12 to 18 ins. 1.00 60.00
Austrian, 5-yr. T, 20 to 30 ins. 16.00 150.00
Mugho, 5-yr. T, 4 to 6 ins. 12.00 110.00
Western Yellow, 2-yr. S, 5 to 7 ins. 2.50 19.00
Savin Juniper, 5-yr. T, 4 to 6 ins. 14.00 120.00
Gold Plume Cypress, 4-yr. T, 6 to 10 ins. 20.00
American Arborvitae, 3-yr. T, 4 to 7 ins. 5.50 45.00
GIRARD BROS. NURSERIES
Geneva, Ohio

LINING-OUT STOCK.

Per Per
Picea Pungens, 3-yr. adigs. \$2.50 \$30.00
Picea Pungens, 4-yr. adigs. 4.50 40.00
Pinus Strobus, 3-yr. adigs. 3.00 25.00
Taxus Canadensis, 2-yr. transplants 3.00 75.00
Taxus Canadensis, 3-yr. transplants 11.00 100.00
Taxus Canadensis, 3-yr. transplants 27.50 250.00
Taxus Hickel, 3-yr. transplants 27.50 250.00
Taxus Hickel, rooted cuttings 13.00 125.00
Taxus Canadensis, rooted cuttings 11.00 100.00
Taxus Canadensis Stricta, rooted cuttings 11.00 100.00
Taxus Overlander, rooted cuttings 11.00 100.00
Taxus Hickel, rooted cuttings 11.00 100.00
Taxus Canadensis, rooted cuttings 16.00 150.00
Only 10 per cent of Capitata furnished with Taxus orders. Shipment of rooted cuttings after May.

Acer Polymorphum and Atropa, pot-grown grafts; per 100, \$100.00.
VERKADE'S NURSERIES, Wayne, N. J.

SURPLUS EVERGREENS

Heavier Grades

Each
Andorra Juniper, 30 to 36 ins. \$2.50
Savin Juniper, 24 to 30 ins. 2.25
Pfitzer Juniper, 30 to 36 ins. 3.50
Virginalis Juniper, 30 to 36 ins. 3.00
English Juniper, 4 to 5 ft. 1.25
Globe Arborvitae, 24 to 30 ins. 2.50
Globe Cypress, 5 to 6 ft. 4.00
American Arborvitae, 5 to 6 ft. 3.50

Smaller Sizes

Ashford Juniper, 24 to 30 ins. 1.25
Ashford Juniper, 2 1/2 to 3 ft. 2.25
Ashford Juniper, 3 to 3 1/2 ft. 2.25
Swedish Juniper, 30 to 36 ins. 2.00
Savin Juniper, 18 to 24 ins. 1.75
Globe Arborvitae, 15 to 18 ins. 1.75
Polish Juniper, 15 to 24 ins. 1.25
Transplanted and cultivated trees. Truckloads and carlots only.
HENRY NURSERIES, Henry, Ill.

EVERGREEN LINERS, many varieties: Roots of all kinds; Seeds; Shade Tree Whips; Flowering Shrubs, lining-out size; Calif. Privet; Mums; Berry Plants; Azaleas and Rhodod. Blueberries, for the trade within commuting distance. We have the most up-to-date and largest supply of large plants of all kinds, ready dug and burlapped, ready to go; no waiting or holding you up when you get here. Prices are right.
W.M.E. WENTZELL EVERGREEN NURSERY
Sewell, N. J. Phone: Wenonah 49 R1

NEW INTRODUCTION

AZALEA HINO-CRIMSON

Showy, clean, crimson-red, nonfading flower. Large, glossy, dark green foliage. Excellent grower with sturdy branches. Good forcer. A cross between Hinodogiri and Amoens, but harder than Hinodogiri. 2 1/2-in. pots, \$25.00 per 100; 250 limit. Ready now. Cash with order only. Ask for color photo.
JOHN VERMEULEN & SON
Westbury, L. I., N. Y.

HARDY LINERS

Per 100
Canada Hemlock, 6 to 9 ins., 2 tr. \$20.00
Canada Hemlock, 9 to 12 ins., 2 tr. 25.00
Zanthorhiza apifolia, rooted layers 5.00
CHAS. H. WILLIAMS NURSERIES
Box 223, Exeter, N. H.

LINING-OUT STOCK. Grafts, cuttings and seedlings of good quality. Some new and interesting introductions of Azaleas, Taxus, Tausa, etc. Ask for our list.
JOHN VERMEULEN & SON, Westbury, L. I., N. Y.

NATIVE AZALEAS

Snow and pink, heavy, good spread. 2 to 3 ft. \$10.00 per 100; \$75.00 per 1000.
MRS. CHARLIE ROBINSON, Greenville, Ga.

LINING-OUT STOCK

Rooted cuttings.		
Euonymus Patens (true berried type).....	Per 100	Per 1000
Euonymus Radicans.....	\$2.50	\$20.00
Euonymus Carrierei.....	8.00	75.00
Euonymus.....	5.00	75.00

Prepaid for cash with order.

PRITCHARD NURSERIES, Ottawa, Kan.
10,000 HEMLOCK, field-grown, twice transplanted, 8 to 12 in., \$20.00 per 100, \$185.00 per 1000. Booking orders for spring delivery. Also B&B sizes per truck or carload.
DAVID C. KANEFF NURSERY, RFD 3, Marietta, O.

HARDY AZALEAS

Heavy specimen clumps, northern-grown. None finer for immediate landscape use. Azalea viscosa and nudiflora, 4 to 6 ft., \$6.00 each. Cash with order. Send your truck.
TUOTI LANDSCAPE CO., Ridgefield, Conn.

FRUIT TREES

HARDY GRAFTED NUT TREES

Crash Carpathian English Walnut, Black Walnut, Butternut, Heartnut. Orders for less than 10 not accepted. Price list on request.
BERNATH'S NURSERY
R. D. 1 Poughkeepsie, N. Y.

SIX ACRES OF PEACH SEEDLINGS

Will consider June budding varieties desired and grow under contract. Write us your offer. PACK TRUE-TO-NAME NURSERY CO., P. O. Box 457, McMinnville, Tenn.

GRASS SODS

We again solicit, after four years' absence, your GRASS SODDING contracts. No job too large or too small for us to handle.
ABBOTT'S SERVICE
Box 208, Flushing, N. Y.

HARDY PLANTS

NEW AND CHOICE PERENNIALS

PENSTEMON CHERRY GLOW (Firebird). Ruby-crimson Foxglove-like blooms. Pot plants, \$3.00 per 12; \$18.00 per 100.
PYRETHRUM MRS. D. B. BLISS. New lovely single salmon-pink. Pot plants, \$3.50 per 12; \$20.00 per 100.
GAILLARDIA MR. SHERBROOKE. Best large yellow. Pot plants, \$3.00 per 12; \$18.00 per 100.
HEMEROCALLIS GOLDENI. Fine orange. \$2.50 per 12; \$15.00 per 100.
HEMEROCALLIS OPHIR. One of the best yellow day lilies. \$4.00 per 12; \$25.00 per 100.
VIOLET ROYAL ROBE. Unusually large lustrous purple violets. Pot plants, \$3.00 per 12; \$18.00 per 100.

THE BEST ASTERS

Pot plants Per 12 Per 100
BEECHWOOD CHALLENGER.
Crimson.....\$3.00 \$18.00
BLUE LAGOON. Beautiful medium blue.....3.50 20.00
PALMYRA. Pure pink novelty.....3.00 18.00
VIOLETTA. Deep violet-purple 3.50 20.00

CORLISS BROS. INC., NURSERIES
8 Reynard Street, Gloucester, Mass.

CHECK YOUR WANT LIST

Per 100
ACHILLEA Filipendulina (yellow).....\$10.00
AQUILEGIA
Mrs. Scott Elliott, Crimston Star, long-spurred Blue, Snow Queen.....10.00
ASTER (Dwarf), 2-yr. diva.....12.00
Nancy, Lady Maddocks, Victor.....12.00
CHRYS. MAXIMUM (Shasta Daisy)
Alaska, Diener's, 2-yr. diva.....5.00
Coreopsis Sunburst.....10.00
DELPHINIUM
Belladonna, Bellamosa, B. and L.
Hyb.....12.00
Pacific Hybrids, 2 Tr.....18.00
Pacific Hybrids, 1 Tr.....15.00
Dianthus Dbl., deep crimson.....8.00
ITALIS, Giant Shirley.....10.00
Gaillardia, Dazzler, Grand Burgundy.....10.00
GYPSOPHILA, Oldhamiana, Paniculata
HOLLYHOCK, Chater's double Col.
Sunset, Red, Rose, White, Yellow.....5.00
PLATYCODON, blue shades.....8.00
PYRETHRUM, mixed.....12.00
SWEET WILLIAM, red.....10.00
Herb, Sage, Thyme.....8.00
Strong 1-year, field-grown plants.
All plants are subject to prior sale.
VITNER'S GARDENS, Manchester, Conn.

HARDY ENGLISH CHRYSANTHEMUMS
Have you tried these English Chrysanthemums? We have been growing them for 5 years and have sold them all over the U. S. They have met with a big response.
For those who would like to try them, we are making the following Special Offer:
10 each 10 varieties rooted cuttings, \$10.00.
SMITH GARDENS, Lewiston, Idaho

HARDY FERNS, tall, medium and dwarf sorts. \$6.00 per 100. Pink peonies. 25c. Marvel Everbearing Strawberries, new sweet, productive, deep rooting, good plant maker. \$1.50 per 100, \$25.00 per 1000. Complete stock otherwise. STRAND NURSERY CO., Taylors Falls, Minn.

ONE OF THE BEST NEW HARDY MUMS

OLIVE LONGLAND

Large double apricot-toned salmon-pink flowers. Very free bloomer. Late September on. An excellent cut flower. Height 2 ft. Potted plants, \$3.00 per 10; \$25.00 per 100. Rooted cuttings, \$2.50 per dozen; \$18.00 per 100.

Send for our new trade list featuring over 100 other new and better varieties of hardy Chrysanthemums, and a complete selection of the new and better perennials, etc.

CARROLL GARDENS

Westminster, Md.

HARDY CHRYSANTHEMUMS

University of New Hampshire varieties. Clean well rooted cuttings for immediate shipment.

	Per doz.	Per 100
Nashua, bronze.....	\$2.50	\$15.00
Sunapee, gold.....	2.50	15.00
Franconia, bronze-gold.....	2.50	15.00
*W. D. Holley, dwarf yellow.....	3.00	20.00

*To be finished in pots for sale about Oct. 10.
25 of one variety at 100 rate; minimum order \$5.00. Terms: Cash with order.
DECATUR FLORAL CO.
Decatur, Ind.

THE DELPHINIUM OF TOMORROW

LYONDEL GIANT HYBRIDS

Massive Spikes—Stately—Majestic—Colorful. A new strain especially selected for its large-size flowers and wide range of beautiful colors. Doubles, semidoubles, singles. Extremely hardy.

\$4.00 per doz., \$25.00 per 100

CORLISS BROS. INC., NURSERIES

6 Reynard Street, Gloucester, Mass.

	Per 100
Alyssum Saxatile Compactum.....	\$ 3.00
Aquilegia Longissima hybrida.....	12.00
Campanula Rapunculoides.....	14.00
Candytuft Queen of Italy.....	8.00
Chelone Torreyi.....	8.00
Coreopsis Double Sunburst.....	8.00
Dianthus Plumarius Spring Beauty.....	8.00
Gaillardia Portola hybrida.....	8.00
Morning Primrose.....	2.00

J. J. NIGARD NURSERY, Herbster, Wis.

PRIMULA SIEBOLDI

New, hardy Primrose; dependable here without special care; likes partial shade; mixed colors; dark rose to white.

Divisions, field-grown clumps

ROSEMONT GARDENS

R. 1. Cedar Rapids, Ia.

	Per 100
White English Violets.....	\$10.00
Marsh Marigolds.....	10.00
Phlox divisions, hardy, 500 mixed colors.....	5.00

WHITE MILLWOOD GARDENS

Pine City, Minn.

VIOLAS

Brilliant purple, slightly fragrant, hardy field-grown plants.
\$3.00 per 100, \$25.00 per 1000.

CEDAR BROOK FARM
R.F.D. 1, Romeo, Mich.

5000 HARDY PHLOX, mixed divisions.

\$7.50 per 100. Good for department store trade.

CLOVERDALE GARDENS & NURSERY
R. R. 6 Peoria, Ill.

HARDY POLYANTHA PRIMROSES

Vetterli & Reinelt Pacific strain.

1-year-old, twice transplanted.

MITSCH NURSERY

1235 Franklin St. Lebanon, Ore.

SIBERIAN IRIS

Delicate bloom on tall stems, assorted hardy, large field-grown plants.
\$3.00 per 100, \$25.00 per 1000.

Cedar Brook Farm, R.F.D. 1, Romeo, Mich.

VIOLETS

Sweet-scented blue, hardy, heavy bloomers; large plants, \$3.00 per 100, \$25.00 per 1000.

MRS. CHARLIE ROBINSON, Greenville, Ga.

NANDINAS

Stout, pretty plants for potting. \$10.00 per 100; \$75.00 per 1000.

MRS. CHARLIE ROBINSON, Greenville, Ga.

SWEET LEMON BALM

Large, nice plants, \$3.00 per 100; \$25.00 per 1000.

MRS. CHARLIE ROBINSON, Greenville, Ga.

ROOTS

GIANT VICTORIA RHUBARB ROOTS ready for immediate shipment, 1/4 to 1/2 in., \$7.50 per 1000; 1/2 to 3/4 in., \$15.00 per 1000; boxing at cost.

ASHCRAFT NURSERY
R. R. No. 1, Box 74 Copemish, Mich.

VICTORIA RHUBARB ROOTS

All sizes from 1/4 in. to 2 in. Also a lining-out grade. Immediate shipment from storage; perfect condition. Will gladly quote you prices per 100 or per 1000.

C. D. WRIGHT, Hamburg, Iowa.

HORSE-RADISH PLANTS, estate inspected, selected plants, 6 to 10 in. long, 3/16 in. root cuttings, \$1.25 per 100, \$10.00 per 1000; 5/16 in. and up, \$1.50 per 100, \$12.50 per 1000. F.O.B. Chicago. Less 2 per cent for cash with order. These are strong, clean healthy plants and shipped to order. RANDOLPH MARKET NURSERY, 808 W. Randolph St., Chicago 7, Ill.

ASPARAGUS—New Jersey-grown. New Jersey is the home of Asparagus. Mary Washington Asparagus roots, 1-yr., \$11.00 per 1000; 2-yr., \$15.00 per 1000. Whole Rhubarb roots, \$5.00 per 100. Horse-radish roots, \$15.00 per 1000. Globe Artichoke roots.
WARREN SHINN, Root Specialist
Woodbury, N. J.

ONION SETS—Yellow or white, best quality, \$4.50 for 32-lb. bushel, \$4.25 in 10-bu. lots. Special prices to large dealers or commercial growers. F.O.B. cash.
LAUREL NURSERY
Springfield Gardens, L. I., N. Y.

MARY WASHINGTON ASPARAGUS ROOTS
1-year, \$2.00 per 100; \$12.00 per 1000.
2-year, \$2.50 per 100, \$15.00 per 1000.

Write for prices on quantity.

PITZONKA'S FANSY FARM, Bristol, Pa.

HORSE-RADISH

1000 1-in. cal., \$10.00 per 100.
BENTON COUNTY NURSERY CO., INC.
Rogers, Ark.

HORSE-RADISH—State inspected roots,

1/4 to 1/2 in., \$1.25 per 100, \$10.00 per 1000. Crowns good, \$1.50 per 100, \$12.00 per 1000.

RILEY'S NURSERY, Concordia, Kan.

HERBS—Tarragon, Lavender, Purple Lavender, Sage, Mint, Thyme, Lemon Balm, Sweet Marjoram, \$16.00 per 100.

WARREN SHINN, Woodbury, N. J.

CHIVES

Cultivated variety, \$8.00 per 1000.

WARREN SHINN, Woodbury, N. J.

SEEDS

After filling our contracts we have the following seeds to offer:

Kentucky Coffee Tree.....\$0.50
Osage Orange.....1.00
Russian Olive, C.S.....1.00
Red Cedar (J. Virg.), C.S.....5.00
Redbud.....2.50
Privet, Sinenet, D.B.....2.50

Write for quantity prices. Will be pleased to contract for 1946 crop.

RIGDON'S TREE SEEDS, Stillwater, Okla.

PEACH PITS, southern collected, high germination, \$3.00 per bu. Peach, Plum, Apricot, fall delivery; 1-ft., 20c; 2-ft., 30c; 3-ft., 40c; 4-ft., 60c; 5-ft., 70c; 6-ft., 80c.

Cash with order.

RIVERDALE NURSERIES, Riverdale, Ga.

SHRUBS AND TREES

NURSERY STOCK

Per 100 Per 1000

Althaea Bush, assorted, 3 to 4

ft. \$20.00 \$150.00

4 to 5 ft. 25.00 200.00

Barberry Thunbergi, 24 to 30

ins. 35.00 300.00

Barberry, Red-leaved, 24 to 30

ins. 40.00 350.00

Buddleia Magnifica, No. 1, 18 to

24 ins., 3 br. up. 10.00 75.00

2 to 3 ft., 4 br. up. 12.50 100.00

3 to 4 ft., 4 br. up. 17.50 150.00

Spiraea Vanhouttei, 2 to 3 ft. 30.00 250.00

2 to 4 ft. 35.00 300.00

Viburnum Opulus Sterile, 8 to

4 ft. 50.00 450.00

Ampelopsis (Boston Ivy), 3-yr.

No. 1, heavy 35.00 300.00

Dormant stock in storage ready for immediate shipment. 250 or more at 1000 rates.

ONARGA NURSERY CO., INC.

Onarga, Ill.

Per 10 Per 100

500 Catalpa Bungei, 2-yr. heads.

5 to 6 ft. \$12.50 \$100.00

1000 Pussy Willow, well rooted,

well branched, 2 to 3 ft. 15.00

1000 Honeysuckle, pink Tatarian, 2-yr., 2 to 3 ft. 25.00

2000 Spiraea, Korean, 2-yr.

2 to 3 ft. 25.00

1000 Philadelphus Coronarius

(Mock Orange), 2-yr.

2 to 3 ft. 25.00

1000 Kieffer Std. Pear, bearing

age, 6 to 8 ft. 12.00 100.00

FINGER LAKE NURSERIES, Geneva, N. Y.

EUROPEAN MOUNTAIN ASH

Fall dug.

1 to 1 1/4 in. \$1.25

1 1/4 to 1 1/2 in. 1.50

1 1/2 to 2 in. 2.00

THE EDWARD LEHDE NURSERIES

Gardenville, N. Y.

ROSES, 2-yr., No. 1, assorted varieties, including Editor McFarland, Red Radiance, Pink Radiance, Paul's Scarlet, Paul Neyron, Mrs. Chas. Bell, Frau Karl Druschki, \$7.50 per 10, \$65.00 per 100.

WAYNESBORO NURSERIES

Waynesboro, Va.

SHRUBS AND TREES—Continued

ORNAMENTAL SHRUBS
Transplanted well branched stock. Per 10
Caragana Arborea, 2 to 3 ft. \$1.20
Cornus Alba Sibirica, 3 to 4 ft. 2.50
Cornus Lutea, Golden Dogwood, 2 to 3 ft. 2.50
Cotoneaster Acutifolia, 2 to 3 ft. 2.00
Foraythia Spectabilis, 3 to 4 ft. 2.50
Honeysuckle Grandiflora Rosea, 3 to 4 ft. 3.10
Lilac Villosa, Late, 3 to 4 ft. 3.50
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30 Cotoneaster monogrica, 4 to 5 ft. 1.00
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By John J. Pinney

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GARDEN CONFERENCE.

[Continued from page 8.]

do much in improving our health and by eating more nutritious foods from our gardens, but we can also make life so much richer for many millions of our people if we can encourage them to improve their home grounds, their parks, their cities and the roads surrounding them."

In discussing "The Importance of the Broad Garden Program," M. L. Wilson, director of extension service, asked for increased gardening education in horticultural science, including genetic science, plant insect and disease studies, newer knowledge of fertilizers and plant nutrition, beyond the classrooms of agricultural schools and colleges. "The growing of plants, not only of vegetables, but trees, shrubs and flowers, can be a real asset to the advancement of modern living, rural and urban," said Mr. Wilson. "Mass understanding of the simpler phases of horticulture, then mass emphasis on gardens is essential."

The need for home and community improvement was stressed in talks by Malcolm H. Dill, chief of planning and design of the Cincinnati Planning Commission; Paul H. Jones, director of the garden educational service of the Ford Motor Co.; John W. Snyder, director of the Office of War Mobilization and Reconversion; Wilson W. Wyatt, administrator of the National Housing Agency, and Lester J. Norris, chairman of the industrial advisory committee of the National Garden Institute.

The use of functional architecture and landscaping and decentralization of communities and districts within the community were advocated by Mr. Dill. He strongly urged all organizations to use their influence on local governmental bodies to require adequate yard space with homes, apartments and office and industrial buildings.

Mr. Snyder called the garden program "a good productive investment that will help stabilize our real estate values and assist in preventing blighted areas in our cities and towns." He thought the long-time garden program made to order for the 3,000,000 people who are now unemployed, for it could provide jobs in addition to increasing the attractiveness of our parks, highways, towns, cities and farms and could provide constructive recreation and relaxation for the increasing numbers of persons who enjoy more leisure hours. "Gardens will help stabilize the wartime communities which have mushroomed up around war factories in the past few years," said Mr. Snyder. There are acres of housing projects that are stark and

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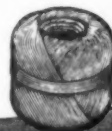
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Before the war disrupted supplies of Nursery Twines, such inquiries were meat and drink to us. Too often during the war years it has not been possible to make either an intelligent recommendation or any kind of delivery. * Now that supplies are again becoming available, it will be a pleasure to recommend and supply the Twines required for the needs of the greatly expanded postwar Nursery Industry.



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GEO. B. CARPENTER & CO.

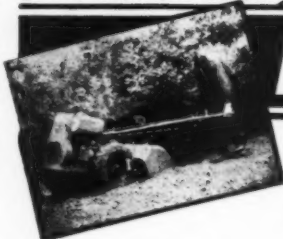
MAIN BUILDING - CHICAGO, ILL.

drab, naked of trees, shrubs, flowers and other growing things. Under the pressure of war production there was not much time to beautify these communities, so that there is now danger of creating new slums, wrecking property values and forcing widespread abandonment, unless we can stabilize them and make them attractive places in which to live. Flowers and vegetable gardens, trees and vines—nothing adds more to the enjoyment and permanence of a community than these. We must sell this program in the towns and cities where the barren neighborhoods exist. Victory gardens may be a step along the road to a more balanced economy in the years ahead when people who work for their wages are not entirely at the mercy of their jobs. If we had had a national gardening program in full operation in the late twenties we might have weathered the early thirties in far better shape. Production is not keeping pace with the demand for food so that the home food garden can also be a means of aiding in the fight against inflation.

"Improved Home and Community Surroundings in the Housing Program" was the subject of Wilson W. Wyatt's message, which was read by H. W. Hochbaum. To meet the housing shortage the National Housing Agency proposes starting 2,700,000 medium and low-cost homes by the end of next year. The 1946 goal is 1,200,000 homes started, of which 700,000 will be of the conventional types and 250,000 prefabricated structures. The 1947 goal is 1,500,000 homes started, of which 900,000 will be the conventional type, 600,000 permanent prefabricated type. Mr. Wyatt said the NHA is advocating homes, not just houses or even mere shelter—homes with attractive furnishings inside and a pleasant yard around the outside. Most every veteran will want a garden of flowers, trees and shrubs, with vegetables as well. The outdoor living room is going to be an important part of each home. "The community," said Mr. Wyatt, "is one of the keystones of the garden and building program. It is the community which can plan so that group housing and slum clearance housing can be set up on attractively landscaped grounds."

In "A National Garden Institute Program for 1946," Paul H. Jones presented the proposal that a program of garden competition be run among the cities of the United States. Each community participating might keep a score card on which it was graded for such points as a general cleanliness of the town including alleys, the maintenance of public parks, the main-

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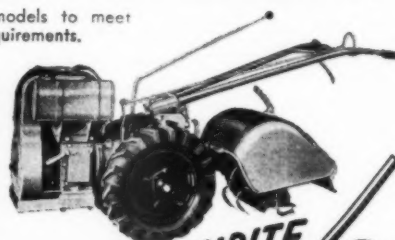


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tenance and planting of municipal gardens, the maintenance of boulevards and green strips, the maintenance of the home garden, the number of family food gardens and the number of organizations cooperating.

Mr. Norris told of the work of the National Garden Institute in furthering a program advocating a real garden home for every family and described the St. Charles plan by which private organizations were pooling resources to build attractive homes for veterans and using the money derived from sales to build more such communities.

Henry A. Wallace, Secretary of Commerce and formerly Secretary of Agriculture, gave an informal talk on his personal experience as a victory gardener and emphasized the need for nutritious food at home and abroad.

The world situation was described and the need for food gardens stressed in talks by Roy F. Hendrichson, deputy director general of UNRRA, speaking on "How Critical Is the Food Situation Abroad?" Chester C. Davis, chairman of the famine emergency, who described "The Action Program of the President's Famine Emergency Committee"; Maj. Gen. Lewis B. Hershey, director of the Selective Service System, who told "What the Selective Service Taught Us About Need for Better Food Habits"; Dr. Frank G. Boudreau, chairman of the food and nutrition board of the National Research Council, talking on "The Importance of Vegetables and Fruits in Meeting Nutrition Needs," and a message from Representative Clarence Cannon, chairman of the House appropriations committee, on "Why the Government Must Encourage the Garden Program."

What was accomplished in home gardens during the war and what they can do now and in the future was told by B. S. Pickett, head of horticulture at Iowa State College, talking on "The National Garden Survey, How It Affects Our Planning"; R. W. Gregory, of the U. S. Office of Education, telling of "Gardening in the School Program"; E. H. Bakken, chairman of the garden committee for national youth organizations, who described "Youth's Role in Today's and Tomorrow's Gardens," and Mrs. William Champlin, president of the National Council of State Garden Clubs, and Eugene Pfister, president of the Men's Garden Club of America.

Among those with trade connections at the conference were R. P. White, executive secretary of the American Association of Nurserymen; R. H. Roland, executive secre-

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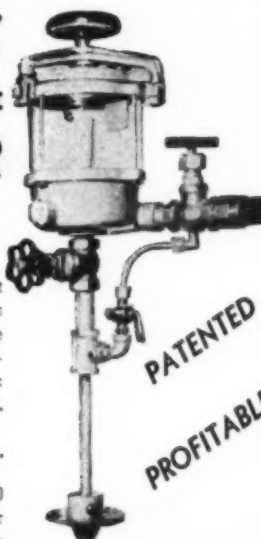
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tary of the Society of American Florists; A. M. Kruse, of the American Society of Landscape Architects; W. Ray Hastings, All-America Rose Selections, Inc.; Eugene Boerner, of Jackson & Perkins Co.; Robert Pyle, of the Conard-Pyle Co.; R. M. Carleton, of Vaughan's Seed Store; J. Franklin Styer, of Styer's Nurseries; J. L. Kilner, of the American Nurseryman; Andrew Wing, of the National Garden Institute, Inc.; Carl Wedell, of the New York State Institute of Agriculture, and Deannette Small, of Topnotch Gardens.

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A widely accepted axiom in business says, "If you can't improve your product, then improve your package." Nurserymen, cooperating with nature, have improved their products many times. Now there is urging, in line with the anticipated increase in volume of business, to improve packaging methods.

It is estimated that the annual volume of business for florists', seed and nursery products will be approximately two billion dollars and that their container needs will approximate 180,000,000 units. These figures are given as the findings of a survey of the industry conducted by the National Paper Box Manufacturers' Association.

Of the total number of packaging units employed, set-up paper boxes represent only 36,000,000, a fact which suggests a possibility for packaging improvement.

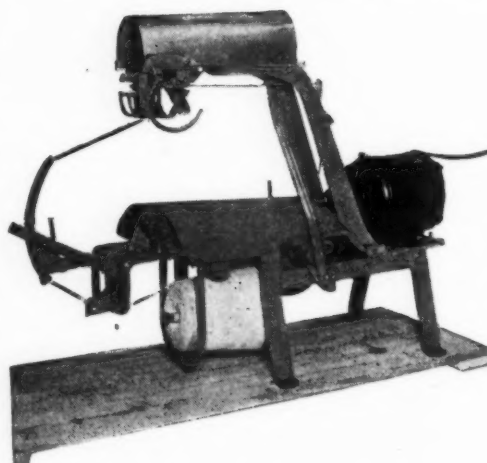
One of the difficulties of the industry in wartime was the shortage of labor, a condition that to some extent has carried over into peacetime. Consequently, any laborsaving factor has immense value. Set-up boxes, requiring less labor for packing and shipping than widely used wooden containers, present obvious aid in this problem.

Some use of large set-up boxes was made for shipping material for war purposes and proved highly satisfactory. Alert nurserymen can profit by this experience and find peacetime applications of the set-up paper box in order to simplify their shipping problems. Indicated increase of mail-order business makes the use of light-weight containers particularly desirable.

This same survey also disclosed that there is a recognition within the industry of the need for new package designs. Since no container lends itself so readily to effective design as the set-up box, with its sturdy construction and attractive advertising display space, it is wise to consider its use before settling on other less effective packaging.



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PLANT NOTES.

[Continued from page 21.]

have watched it pine away under what they thought was tender care are likely to miss much good garden material if they let that experience keep them away from other milk-worts. For instance, the little white-haired species, *P. alba*, native to the dry plains from Kansas southward, is not only easy to grow in a dry sunny situation, but it possesses a quiet beauty which appeals to me and would no doubt to other gardeners. Its ease of culture, the hardiness of material from the northern part of its range, ease of propagation and a May to July blooming period, during which it produces pretty white angel-wing flowers on green wand-like stems, adds up to a good garden plant, especially for the neighborhood grower who can show his wares rather than try to describe them on the printed page.

Iberis Saxatilis.

Spring is the most exciting time in a gardener's life. There are more fruitful seasons, to be sure, and more colorful ones, but none can compare with it for interest for the northern gardener. When does spring arrive for the gardener? The calendar and its maker mean little in arriving at an answer. And what is spring's first sign? Thoreau thought that "the first obvious evidence of spring is in the pushing out of the swamp-willow catkins, the pushing up of skunk-cabbage spathes, and pads at the bottom of waters." Mrs. Wilder said it is "when we find the first flower." That happy event varies from year to year in this garden, depending largely upon when the accumulation of snow disappears before the caresses of the returning sun. Often before that occurs snowdrops will begin swaying in the breeze between drifts of snow, and then we do not have to wait long for the rock candy-tuft.

When I reach it, *Iberis saxatilis*, I have come to my idea of the perfect master of ceremonies at the announcement of spring. Hardy, willing, intrepid, *I. saxatilis* squats in many a sunny corner of this garden, ready to proclaim the opening of another garden year. It prepares for this role, of course, by forming clusters of buds at the ends of the branches in fall, and a long autumn of impatience nearly always creates a little flutter of chalk white before it is tucked in under a blanket of snow.

The books tell us *I. saxatilis* grows six inches, more or less, in height. They are speaking then, I think, of

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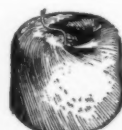


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the results of its wayward ways, for it is a notorious mixer when others of the kind are in its neighborhood. True saxatilis should not be over two inches tall, according to my understanding, though it may spread out to close to a foot with its ground-hugging woody branches. That would take a long time, however, for I have plants 20 years old that are not much more than six inches across. The true thing is one of the joys of spring for this gardener and would be welcome at any season it chose to array itself in its white cloud.

It requires sunshine, of course, and good drainage. I suspect it would be rather short-lived on the level in heavy soil, for it seems to prefer the perfect drainage of elevated spots in rock garden and wall. Given that, or even a deep gritty soil on the level, it should keep in shape for years, growing in circumference and beauty as the years pass. All candytufts, including this one, are easily grown from seeds, when one can get uncontaminated seeds. But saxatilis is impatient of too much moisture both in the seedbed and after it has been transplanted to a pot. Incidentally, I have had best results from planting seeds early in a pan and transplanting the seedlings when large enough to handle, putting each plant in a 2-inch pot until large enough to transfer to a frame. It may also be grown from cuttings of new growths taken a month or so after flowering ceases.

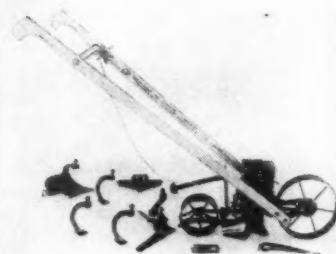
So-called Hardy Amaryllis.

Here is one of the cases where the scientist and the stickler for a standard common name run into trouble. The scientist tells us the plant is not an amaryllis, but the day-by-day gardener pays little attention to that because he has always known it as Hall's amaryllis, and hardy amaryllis it will continue to be to him. "What," he asks, "is the difference between amaryllis and lycoris?" and the botanist tells him it lies in a few minor technical characteristics, such as the number of ovules in a cell and color of the seeds. And that leaves the gardener cold. We need not look into the plight of the proponent of standardized common names; his misery is complete without any agitation. We see, though, that the gardener is not far wrong when he calls it, Lycoris squamigera, the hardy amaryllis.

Of more interest to the nurseryman is the fact that this is one of the better summer-flowering bulbs, if it is correctly used. But it is not easy to use it felicitously in small gardens. That is true because of the habits of the plant, including its disappearance in early summer. If it did its disappearing act with any degree

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of grace, one would not object, but it insists on leaving a messy lot of yellow foliage to plague the gardener. And then when it puts on its show in August, it sends up a naked scape which is rather disconcerting unless one has made provision for some kind of ground cover or companion plants to cover its nakedness. The object, as I see it, is to cover the unsightliness of the lycoris foliage and to furnish some sort of background for the 2-foot naked stems. I have seen *Anchusa myosotidiflora* used for the purpose and it made a good combination, the anchusa blooming in spring and supplying a background for the other's flowering in August. A better suggestion will be found, I think, in planting the lycoris between clumps of gas plant, and a still better cover, in my estimation, is *Campanula lactiflora alba*, which usually is in bloom at the time lycoris is displaying its umbels of lavender-pink trumpets.

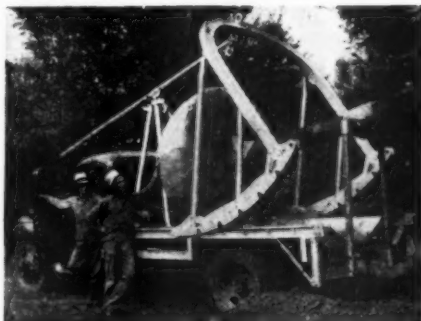
In any case the bulbs should be planted where they will not interfere with the operations which are a part of good gardening: otherwise a deep working of the soil during their dormant period may mean losses. Here we plant large bulbs about eight inches deep, though that would probably not be necessary in a warmer climate. They are said to benefit by a cushion of sand in heavy soil, but of that I cannot say because our soil is not that kind. They do well in either sun or part shade, preferably the latter, for the flowers then last longer. It is generally propagated by natural division of the bulbs. The books talk of slow increase, mentioning a multiplication of two or three in five years. But that must be unduly slow or our light sand must induce more rapid multiplication, for they step up their progress twofold or threefold here.

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AMEND QUARANTINE ACT.

[Concluded from page 23.]

this bill, should be informed by their constituents. Nurserymen residing in those states with senators on this committee are particularly urged to write their views in support or in opposition. Judging from the vote of the board of the A. A. N. at Chicago, the overwhelming majority of nurserymen in this country will be in full support of the bill. The Washington office of the A. A. N. will appreciate copies of letters you write.

This is an important piece of legislation to every nurseryman, and it is your obligation to let your elected representatives in the Senate know how you feel about it.

Elmer Thomas, Oklahoma, is chairman of the Senate committee on agriculture and forestry. Other members are: Burton K. Wheeler, Montana; John H. Bankhead, II, Alabama; Theodore G. Bilbo, Mississippi; Allen J. Ellender, Louisiana; Scott W. Lucas, Illinois; Tom Stewart, Tennessee; Richard B. Russell, Georgia; Tom Connally, Texas; Sheridan Downey, California; Clyde R. Hoey, North Carolina; Arthur Capper, Kansas; Hendrik Shinstead, Minnesota; Raymond E. Willis, Indiana; George D. Aiken, Vermont; Harlan J. Bushfield, South Dakota; George A. Wilson, Iowa; Hugh Butler, Nebraska; Guy Cordon, Oregon. The address of the committee is Senate Office building, Washington 25, D. C.

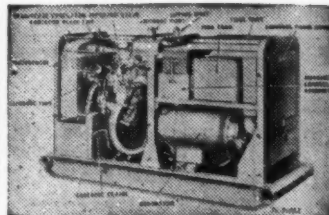
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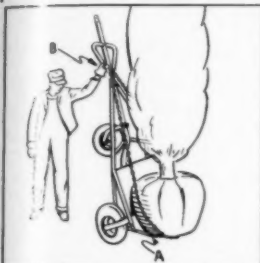
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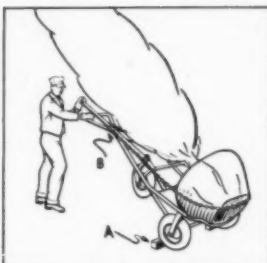


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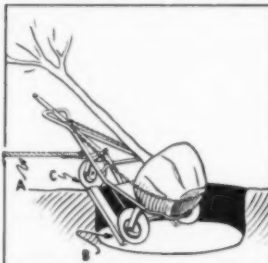
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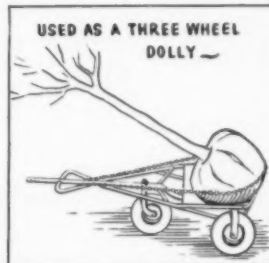
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